480W Single Output Industrial DIN RAIL with PFC Function SDR-480 series

■ Features :

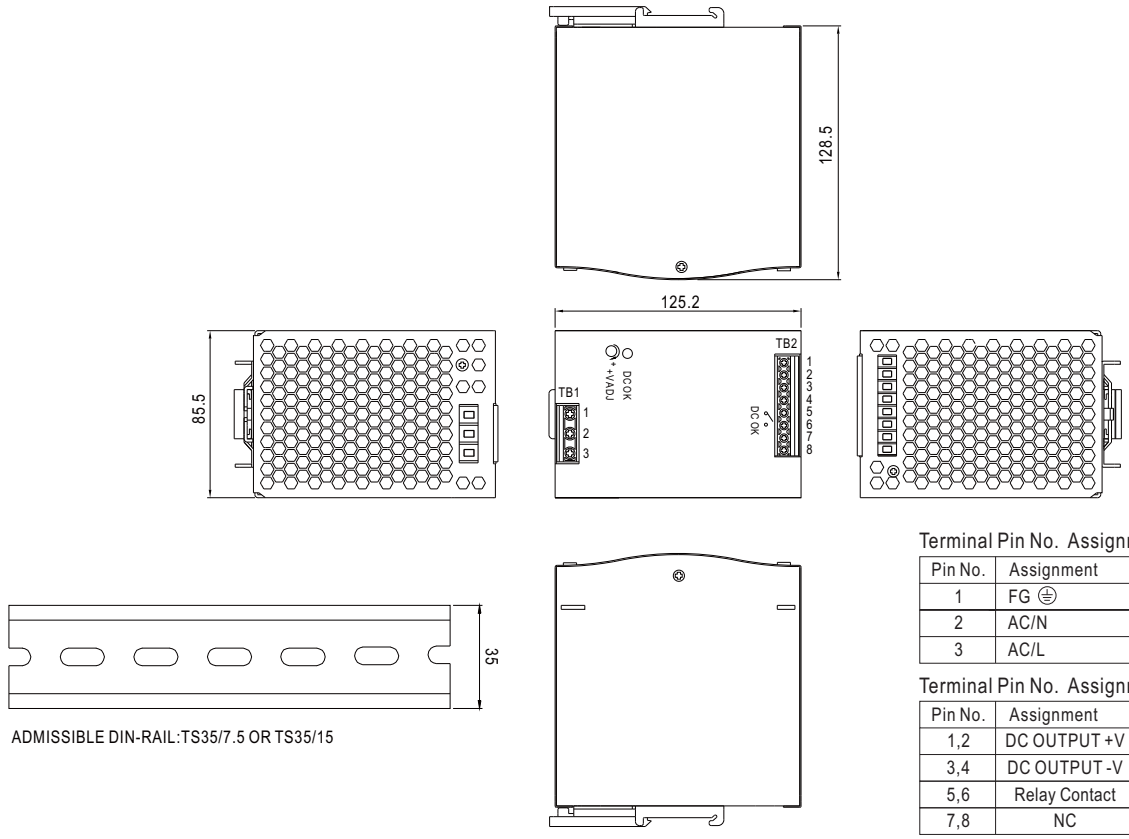
- High efficiency 94% and low power dissipation
- 150% peak load capability
- Built-in active PFC function, PF>0.94
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- Can be installed on DIN rail TS-35/7.5 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-480-48
OUTPUT	DC VOLTAGE	48V
	RATED CURRENT	10A
	CURRENT RANGE	0 ~ 10A
	RATED POWER	480W
	PEAK CURRENT	15A
	PEAK POWER Note.6	720W (3sec.)
	RIPPLE & NOISE (max.) Note.2	120mVp-p
	VOLTAGE ADJ. RANGE	48 ~ 55V
	VOLTAGE TOLERANCE Note.3	±1.0%
	LINE REGULATION	±0.5%
	LOAD REGULATION	±1.0%
	SETUP, RISE TIME	1500ms, 150ms/230VAC 3000ms, 150ms/115VAC at full load
	HOLD UP TIME (Typ.)	14ms/230VAC at full load
INPUT	VOLTAGE RANGE Note.7	90 ~ 264VAC 127 ~ 370VDC
	FREQUENCY RANGE	47 ~ 63Hz
	POWER FACTOR (Typ.)	0.94/230VAC 0.99/115VAC at full load
	EFFICIENCY (Typ.)	94%
	AC CURRENT (Typ.)	5A/115VAC 2.5A/230VAC
	INRUSH CURRENT (Typ.)	40A/115VAC 80A/230VAC
	LEAKAGE CURRENT	<0.8mA / 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	56 ~ 65V
		Protection type : Shut down o/p voltage with auto-recovery or re-power on to recovery
	OVER TEMPERATURE	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. Note.5	-25 ~ +70℃ (Refer to "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 ; (meet 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℃/ 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	112.9K hrs min. MIL-HDBK-217F (25℃)
	DIMENSION	85.5*125.2*128.5mm (W*H*D)
	PACKING	1.6Kg; 8pcs/13.8Kg/0.9CUFT
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 peak power max. and the average output power should not exceed the rate power. 7. Derating may be needed under low input voltage. Please check the derating curve for more details.	

■ Mechanical Specification

Case No.984A Unit:mm



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

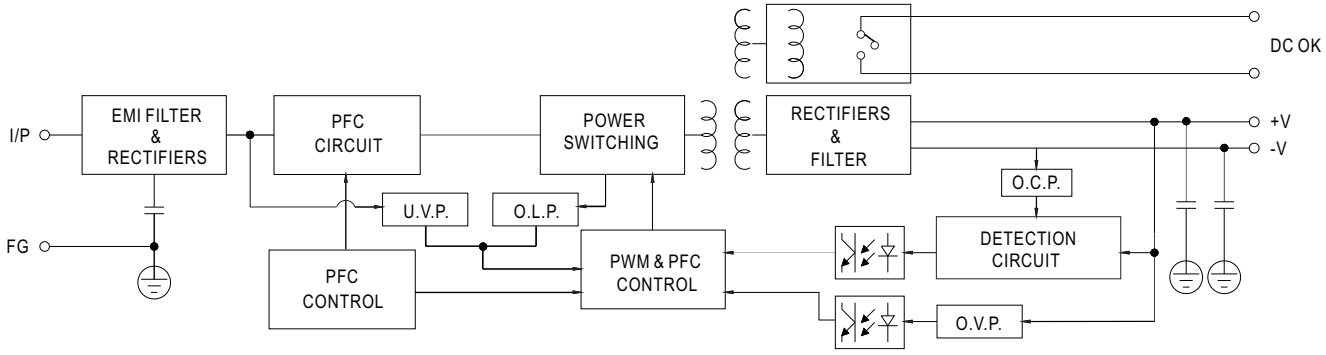
Terminal Pin No. Assignment (TB1)

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

Terminal Pin No. Assignment (TB2)

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V
5,6	Relay Contact
7,8	NC

■ Block Diagram

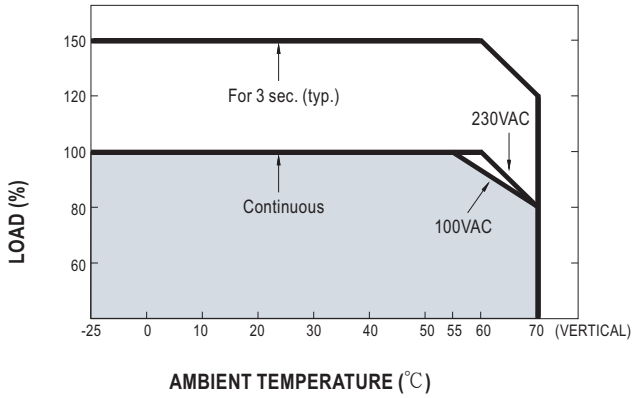


■ DC OK Relay Contact

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

■ Peak Loading

■ Derating Curve



■ Output derating VS input voltage