



**Features :**

- Current sharing up to 3840W(7+1)
- 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
- 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



**GTIN CODE**

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>



**SPECIFICATION**

MODEL	SDR-480P-24		SDR-480P-48	
OUTPUT	DC VOLTAGE	24V	48V	
	RATED CURRENT	20A	10A	
	CURRENT RANGE	0 ~ 20A	0 ~ 10A	
	RATED POWER	480W	480W	
	PEAK CURRENT	30A	15A	
	PEAK POWER Note.6	720W (3sec.)		
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	
	VOLTAGE ADJ. RANGE	24 ~ 28V	48 ~ 55V	
	VOLTAGE TOLERANCE Note.3	± 1.2%	± 1.0%	
	LINE REGULATION	± 0.5%	± 0.5%	
	LOAD REGULATION	± 1.0%	± 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	<0.6mA / 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	
	OVER TEMPERATURE	105°C ± 5°C (TSW : detect on heatsink of power switch) Protection type : Shut down o/p voltage with auto-recovery or re-power on to recovery		
FUNCTION	DC OK REALY CONTACT RATINGS (max.)	60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load		
	CURRENT SHARING	Please see the Function Manual		
ENVIRONMENT	WORKING TEMP. Note.5	-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 (Note 4)	SAFETY STANDARDS	UL508, TUV BS EN/EN62368-1, AS/NZS 62368.1, EAC TP TC 004, BSMI CNS15598-1 approved		
	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) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020, CNS15936		
OTHERS	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, BS EN/EN61000-6-2 (BS EN/EN50082-2), BS EN/EN61204-3, heavy industry level, EAC TP TC 020, SEMI F47 approved		
	MTBF	969.8K hrs min. Telcordia SR-332 (Bellcore) ; 118.6K hrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	85.5*125.2*128.5mm (W*H*D)		
	PACKING	1.6Kg; 8pcs/13.8Kg/0.9CUFT		

**NOTE**

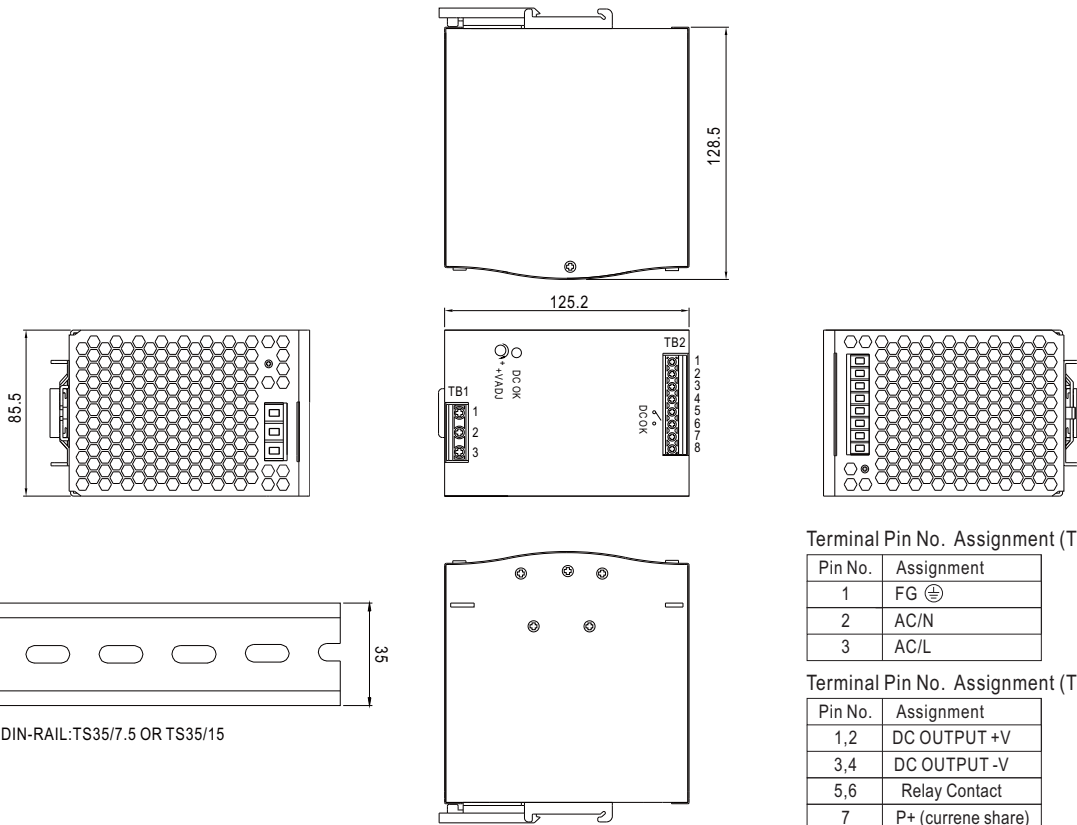
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μ F & 47 μ F parallel capacitor.
3. Tolerance : includes set up tolerance, line 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. (as available on [https://www.meanwell.com/Upload/PDF/EMI\\_statement\\_en.pdf](https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf))
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.
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

(Unit: mm , tolerance  $\pm 1$ mm)

Case No.984A



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

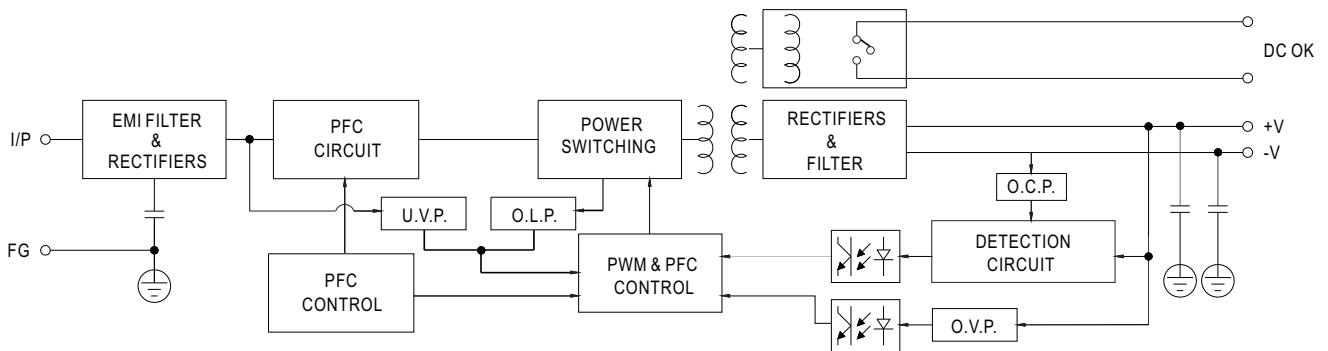
Terminal Pin No. Assignment (TB1)

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

Terminal Pin No. Assignment (TB2)

Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V
5,6	Relay Contact
7	P+ (currene share)
8	P- (currene share)

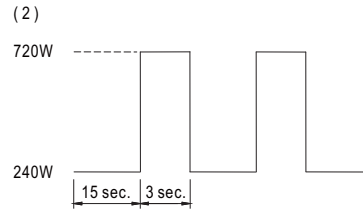
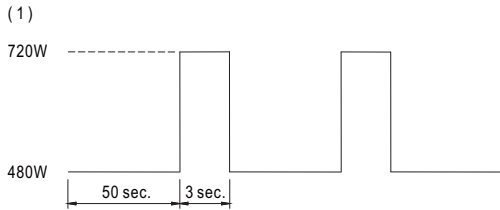
## Block Diagram



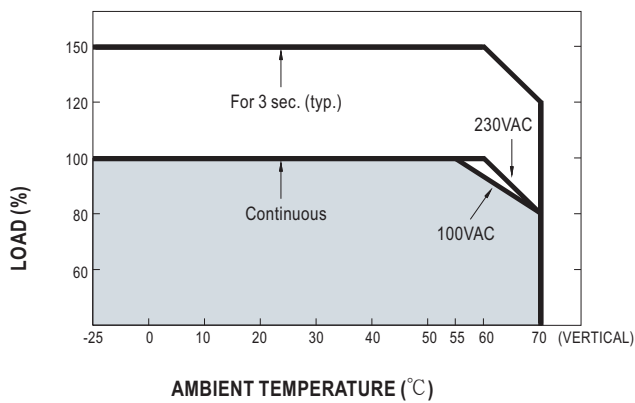
## DC OK Relay Contact

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

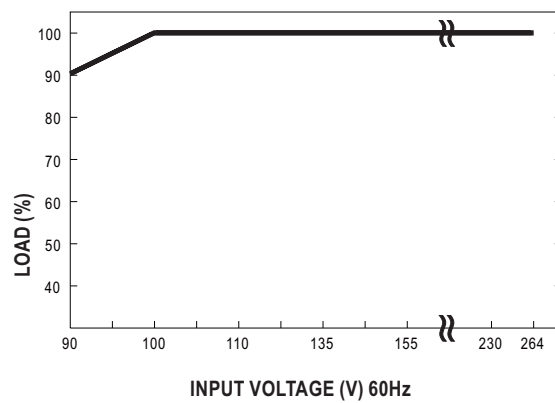
### Peak Loading



### Derating Curve



### Output derating VS input voltage



### Function Manual

#### 1. Current sharing

- (1) Parallel operation is available by connecting the units shown as below (P+,P- are connected mutually in parallel) :
- (2) The voltage difference among each output should be minimized that less than 0.2V is required.
- (3) The total output current must not exceed the value determined by the following equation (Output current at parallel operation)  

$$= (\text{The rated current per unit}) \times (\text{Number of unit}) \times 0.9.$$
- (4) In parallel operation 8 units is the maximum, please consult the manufacture for other applications.
- (5) When in parallel operation, the minimum output load should be greater than 3% of total output load.  
 (Min. load > 3% rated current per unit x number of unit)

