



### 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

User's Manual



### 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)		
NOTE	PACKING	1.6Kg; 8pcs/13.8Kg/0.9CUFT		
		<ol style="list-style-type: none"> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μF &amp; 47 μF parallel capacitor.</li> <li>Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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 <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a>)</li> <li>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.</li> <li>3 seconds peak power max. and the average output power should not exceed the rate power.</li> <li>Derating may be needed under low input voltage. Please check the derating curve for more details.</li> <li>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).</li> </ol>		

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※ Product Liability Disclaimer : For detailed information, please refer to <https://www.meanwell.com/serviceDisclaimer.aspx>



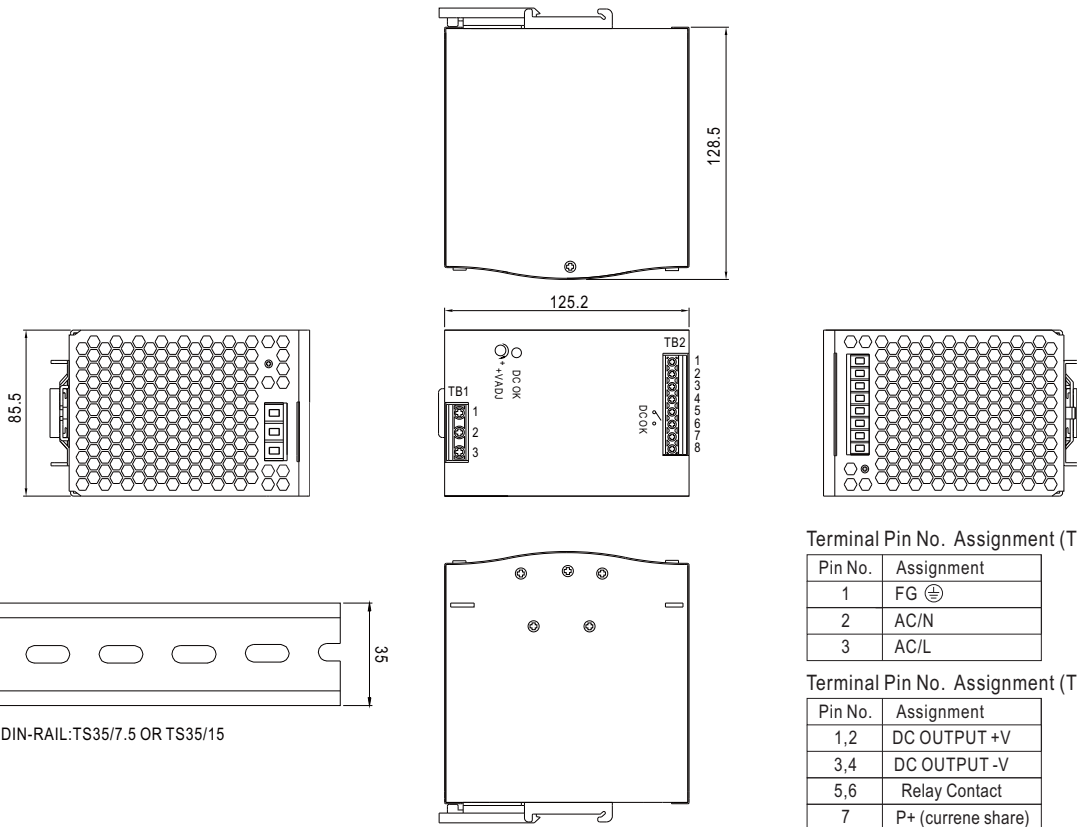
480W Single Output Industrial DIN RAIL with PFC and Parallel Function

**SDR-480P** series

**Mechanical Specification**

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

Case No.984A



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

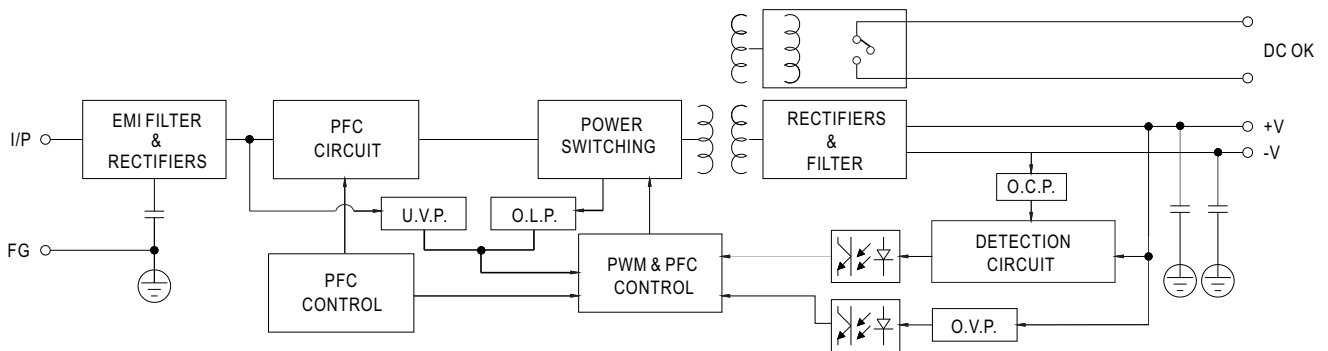
Terminal Pin No. Assignment (TB1)

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**



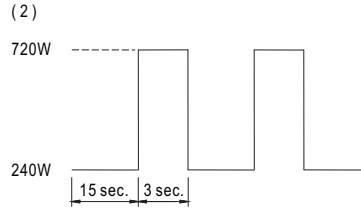
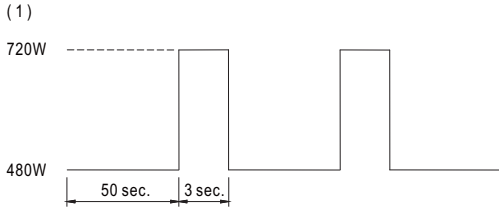
**DC OK Relay Contact**

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

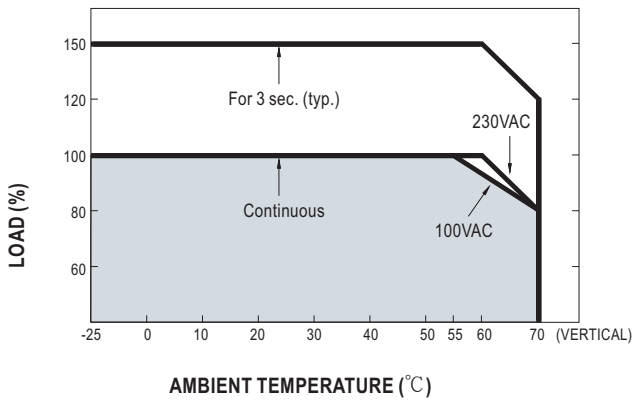


# 480W Single Output Industrial DIN RAIL with PFC and Parallel Function **SDR-480P** series

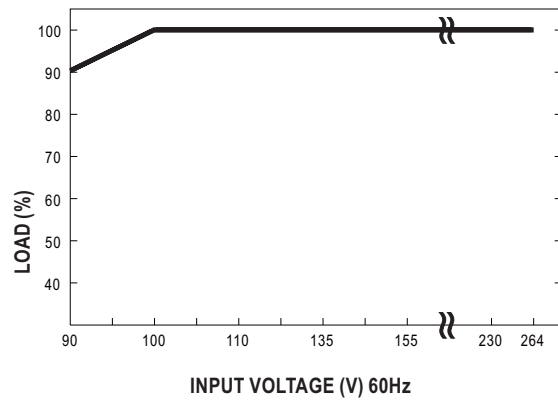
## Peak Loading



## 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)  
 =(The rated current per unit) x (Number of unit) x 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)

