PS-C480 Series
Specifications

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
- DIN rail mountable
- 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

Cat. No.	PS-C48024	PS-C48048
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	720W (3 sec.) 3 seconds peak power max. and the average output power should not exceed the rate power	
RIPPLE & NOISE (max)	100mVp-p	120mVp-p
	Ripple & noise are measured at 20MHz of bandwidth by using a 12 twisted pair-wire terminated with a 0.1μF & 47μF parallel capacitor.	
VOLTAGE ADJ. RANGE	24 ~ 28V	48 ~ 55V
VOLTAGE TOLERANCE	±1.2%	±1.0%
	Tolerance: includes set up tolerance, line regulation and load regulation.	
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	90 ~ 264VAC 127 ~ 370VDC	
	Deating may be needed under low input voltages, please check the derating curve for more detail	
FREQUENCY RANGE	47 ~ 63Hz	
POWER FACTOR (Typ.)	0.94 / 230VAC 0.99 / 115VAC at full load	
EFFICIENCY (Typ.)	94%	
	After 30 minutes of burn-in	
AC CURRENT (Typ.)	5A / 115VAC 2.5A / 230VAC	
INRUSH CURRENT (Typ.)	40A / 115VAC 80A / 230VAC	
LEAKAGE CURRENT	≤ 0.8 mA / 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 shut down o/p voltage after 2 seconds	
OVER VOLTAGE	29 ~ 33V	56 ~ 65V
	Protection type: Shut down o/p voltage with auto-recovery on re-power on to recovery	
OVER TEMPERATURE	105°C ± 5°C (TSW: detect on heat sink of power switch)	
	Protection type: Shut down o/p voltage, re-power automatically after temperature goes down	
DC OK RELAY CONTACT RATINGS (max.)	60VDC / 0.3A; 30VDC / 1A; 30VAC / 0.5A resistive load	
ENVIRONMENT		
WORKING TEMP.	-25 ~ +70°C (Refer to output load derating curve)	
	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.	
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	10 ~ 500Hz, 2G 10min./1cycle, 60 min. each long X,Y, Z axes	
MOUNTING	Compliance to IEC60068-2-6	
SAFETY & EMC		
SAFETY STANDARDS	UL508 EN60950-1 compliant	
WITHSTAND VOLTAGE	I/P-O/P: 3KVAC I/P-FG: 1.5KVAC 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)	
EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B	
HARMONIC CURRENT	Compliance to EN61000-3-2,-3	
EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204; EN55024; EN61000-6-2; (EN50082-2), EN61204-3; heavy industry level; criteria A, SEMI F47, GL approved	
	The power supply is considered a component which will installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.	
OTHERS		
MTBF	112.9K hrs min. MIL-HDBK-217K (25°C)	
DIMENSION	85.5x125.2x128.5mm (WxHxD)	
PACKING	1.6Kg; 8pcs / 13.8Kg / 0.9CUFT	
	All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.	

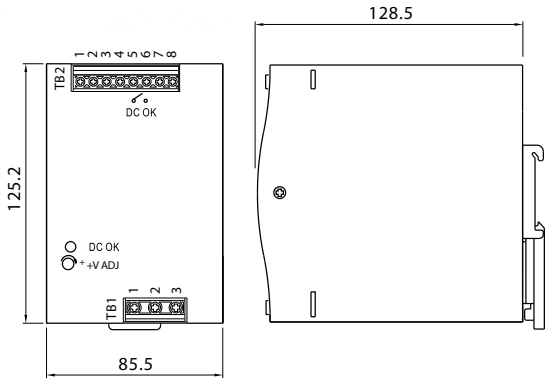
Mechanical Specification

Terminal Pin No. Assignment (TB1)

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

Terminal Pin No. Assignment (TB2)

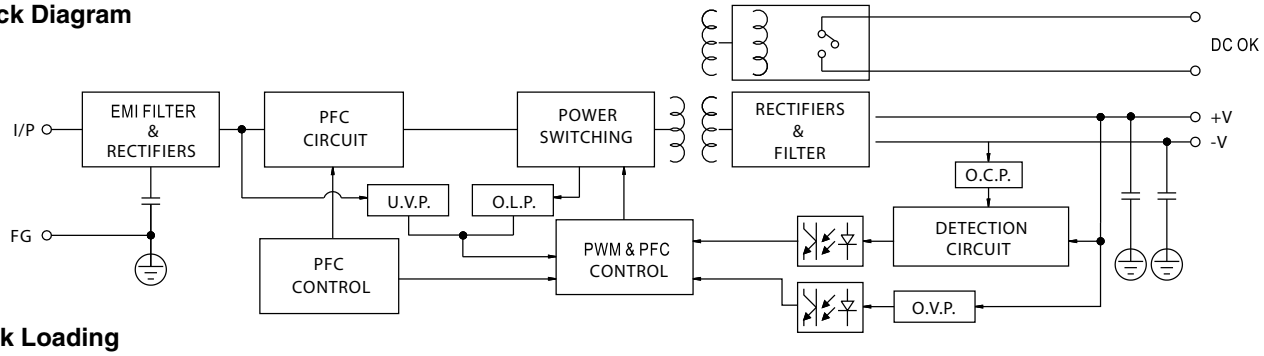
Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V
5,6	Relay Contact
7,8	NC



DC OK Relay Contact

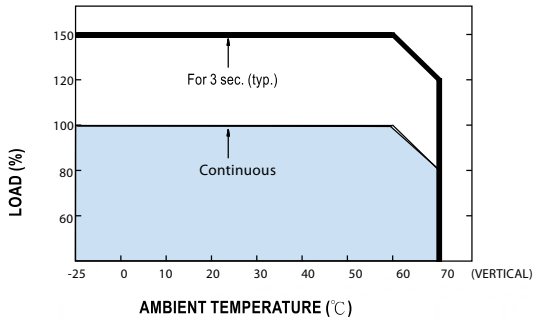
Contact Close	When the output voltage reaches the adjusted output voltage.
Contact Open	When the output voltage drop below 90% output voltage.
Contact Ratings (max.)	30V/1A resistive load

Block Diagram

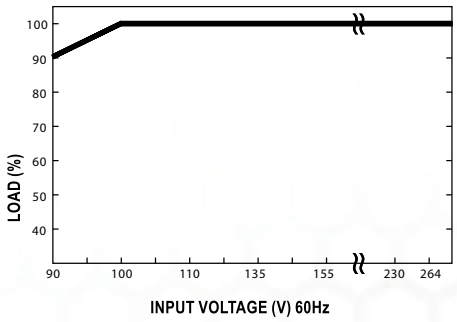


Peak Loading

Derating Curve



Output Derating VS Input Voltage



Note: All dimensions are in millimeters, to convert to inches multiply by 0.03937.