



PARALLEL

PS-C480P Series With Parallel Function 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 / Overtemperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- DIN rail mountable
- Current sharing up to 380W (1+7)
- 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 year warranty

OUTPUT

Cat. No.	PS-C480P24	PS-C480P48
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.)	
RIPPLE & NOISE (max)	100mVp-p	120mVp-p
VOLTAGE ADJ. RANGE	24 ~ 28V	48 ~ 55V
VOLTAGE TOLERANCE	±1.2%	±1.0%
LINE REGULATION	±0.5%	±0.5%
LOAD REGULATION	±1.0%	±1.0%
SETUP, RISE, HOLD UP TIME	1500ms, 150ms, 14ms / 230VAC	3000ms, 150ms / 115VAC at full load

3 seconds peak power max. and the average output power should not exceed the rate power
Ripple & noise are measured at 20MHz of bandwidth by using a 12 twisted pair-wire terminated with a 0.1µF & 47µF parallel capacitor.

INPUT

VOLTAGE RANGE	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 (max.)	5A / 115VAC 2.5A / 230VAC
INRUSH CURRENT (Typ.)	40A / 115VAC 80A / 230VAC
LEAKAGE CURRENT	≤ 0.6 mA / 240VAC

Derating may be needed under low input voltages, please check the derating curve for more detail
After 30 minutes of burn-in.

PROTECTION

OVERLOAD	Normally works within 110 ~ 150% rated output power for more than 3 seconds and then shut down overvoltage with auto-recovery ≥ 150% rated power, constant current limiting with auto-recovery within 2 seconds and shut down overvoltage after 2 seconds
OVERVOLTAGE	29 ~ 33V 56 ~ 65V
OVERTEMPERATURE	105°C ± 5°C (TSW: detect on heat sink of power switch) Protection type: Shut down overvoltage with auto-recovery on re-power on to recovery
CURRENT SHARING	Please see function diagram
DC OK RELAY CONTACT RATINGS (max.)	60VDC / 0.3A; 30VDC / 1A; 30VAC / 0.5A resistive load

Protection type: Shut down overvoltage with auto-recovery on re-power on to recovery
Protection type: Shut down overvoltage, re-power automatically after temperature goes down

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./1 cycle, 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 be 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.

For the latest on Altech Power Supply specifications please visit www.altechcorp.com/power.

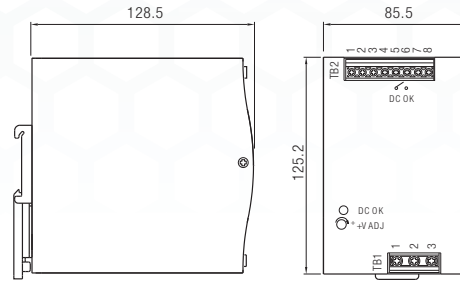
Mechanical Specification

Terminal Pin No. Assignment (TB1)

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

Terminal Pin No. Assignment (TB2)

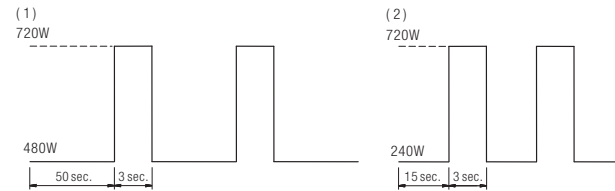
Pin No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V
5,6	Relay Contact
7	P+ (current share)
8	P- (current share)



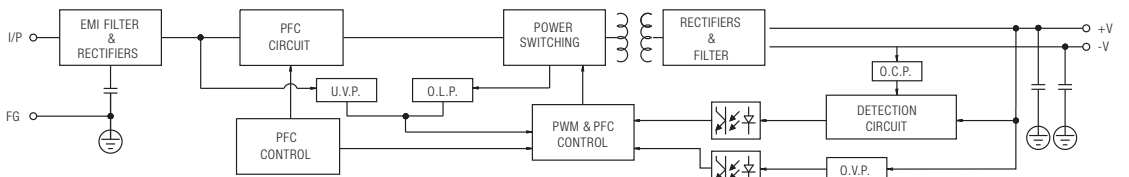
DC OK Relay Contact

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

Peak Loading

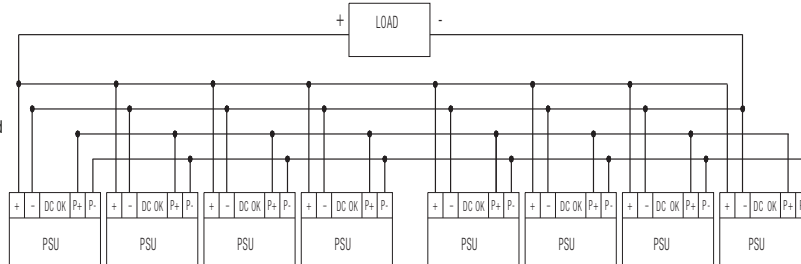


Block Diagram

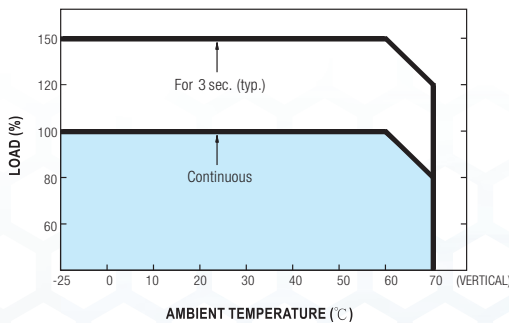


Function Diagram

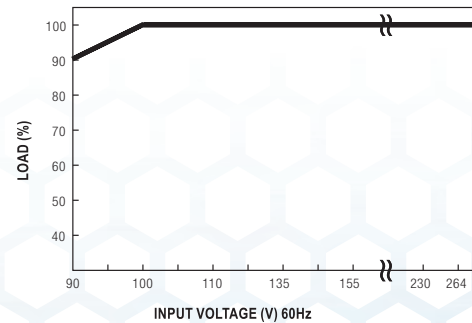
- Current sharing
- Parallel operation is available by connecting the units shown as below (P+,P- are connected mutually in parallel);
- The voltage difference among each output should be minimized that less than 2% is required.
- The total output current must not exceed the value determined by the following equation (Output current at parallel operation) = (The rated current per unit) x (Number of unit) x 0.9.
- In parallel operation 8 units is the maximum, please consult the manufacture for other applications.
- 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)



Derating Curve



Output Derating VS Input Voltage



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

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [DIN Rail Power Supplies](#) category:

Click to view products by [Altech](#) manufacturer:

Other Similar products are found below :

[PS-3015](#) [PSP-480S48](#) [PSR-SD25](#) [PS-S6024](#) [DR-45-24](#) [DRP048V120W1BA](#) [DVP01PU-S](#) [DVP06AD-S](#) [DVP06XA-S](#) [DVDPNET-SL](#)
[DVDPDT01-S](#) [DVPPS01](#) [DVPPS02](#) [KHNA30F-5](#) [KHNA60F-24](#) [S8JX-G01524](#) [S8JX-G01548C](#) [S8JX-G03512D](#) [S8VS-09024B-F](#) [PS-6012](#)
[PS9Z-5R1G](#) [PS-C24024](#) [PSC-9648](#) [5607189](#) [KHNA30F-24](#) [KHNA480F-24](#) [KHNA90F-12](#) [KHNA90F-24](#) [DVP08ST11N](#) [DVPACAB530](#)
[DVPCOPM-SL](#) [DVPEN01-SL](#) [DVPPF01-S](#) [S8JX-G10012](#) [S8JX-G15024](#) [CBI1210A](#) [SS14011524](#) [S8JX-G01505C](#) [S8TS-06024-E1](#) [PS-](#)
[S2012](#) [PSW-12024](#) [PS-UPS40](#) [PSC-6024](#) [S8VS-48024A-F](#) [PSD-A60W12](#) [96PS-A120WDIN](#) [PSD-A60W48](#) [S8JX-G03515CD](#) [PSD-](#)
[A40W12](#) [PSD-A40W24](#)