

# **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 / Overtemperature
- 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 year warranty

| <b>0U</b> | TP | UT |  |
|-----------|----|----|--|
|           |    | -  |  |

## INPUT

### PROTECTION

## **ENVIRONMENT**

## **SAFETY & EMC**

#### **OTHERS**

|   | Cat. No.  | PS-C48024  | PS-C48048  |  |
|---|---|--|--|--|
|   | DC VOLTAGE  | 24V  | 48V  |  |
|   | RATED CURRENT   | 20A  | 10A  |  |
|   | CURRENT RANGE   | 0 ~ 20A  | 0 ~ 10A  |  |
|   | RATED POWER   | 480W   | 480W   |  |
|   | PEAK CURRENT  | 30A  | 15A  |  |
|   |   |  | IJA  |  |
|   | PEAK POWER RIPPLE & NOISE (max)                                       | 720W (3 sec.)<br>3 seconds peak power max. and the average<br>100mVp-p   | e output power should not exceed the rate power 120mVp-p               |  |
|   |   | Ripple & noise are measured at 20MHz of bandwidth by using   | a 12 twisted pair-wire terminated with a 0.1µF & 47µF parallel capacit |  |
|   | VOLTAGE ADJ. RANGE  | 24 ~ 28V   | 48 ~ 55V   |  |
|   |   |  | 1.0 001  |  |
|   | VOLTAGE TOLERANCE   | ±1.2%  | ±1.0%  |  |
|   |   | Tolerance: includes set up tolerance, line regulation and loa  | _ =  |  |
|   | LINE REGULATION   | ±0.5%  | ±0.5%  |  |
|   | LOAD REGULATION   | ±1.0%  | ±1.0%  |  |
|   | SETUP, RISE TIME  | 1500ms, 150ms / 230VAC 3000ms, 150   | Oms / 115VAC at full load  |  |
|   | HOLD UP TIME (Typ.)   | 14ms / 230VAC at full load   |  |  |
|   |   |  |  |  |
|   | VOLTAGE RANGE   | 90 ~ 264VAC 127 ~ 370VDC   |  |  |
|   |   | Derating may be needed under low input voltages, please c  | heck the derating curve for more detail                                |  |
|   | FREQUENCY RANGE   | 47 ~ 63Hz  |  |  |
|   | POWER FACTOR (Typ.)   | 0.94 / 230VAC  |  |  |
|   | EFFICIENCY (Typ.)   | 94%  |  |  |
|   | (31)  | 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  |  |  |
|   | OVERLOAD  | Normally works within 110 ~ 150% rated ou  | tput power for more than 3 seconds and then shu                        |  |
|   |   | down overvoltage with auto-recovery  |  |  |
|   |   | ≥ 150% rated power, constant current limiting  | ng with auto-recovery within 2 seconds and shut                        |  |
|   |   | down overvoltage after 2 seconds   | <b>3</b>   |  |
|   | OVERVOLTAGE   | 29 ~ 33V   | 56 ~ 65V   |  |
|   | OVERTOEIT TOE   |  |  |  |
|   | OVEDTEMBEDATUBE   | Protection type: Shut down overvoltage with auto-recovery on re-power on to recovery                                 |  |  |
|   | OVERTEMPERATURE   | $105^{\circ}\text{C} \pm 5^{\circ}\text{C}$ (TSW: detect on heat sink of power switch)                               |  |  |
|   |   | Protection type: Shut down overvoltage, re-power automatic   |  |  |
|   | DC OK RELAY CONTACT RATINGS (max.)                                    | 60VDC / 0.3A; 30VDC / 1A; 30VAC / 0.5A res   | istive load  |  |
|   | WORKING TEMP.   | -25 ~ +70°C (Refer to output load derating c   | urve)  |  |
|   |   | Installation clearances: 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded |  |  |
|   |   |  | _  |  |
|   | WORKING HUMIDITY  | permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.            |  |  |
|   |   | 20 ~ 95% RH non-condensing   |  |  |
|   | STORAGE TEMP., HUMIDITY   | -40 ~ +85°C, 10 ~ 95% RH   |  |  |
|   | TEMP. COEFFICIENT $\pm 0.03\%$ / $^{\circ}$ C (0 $\sim 50^{\circ}$ C) |  |  |  |
|   | VIBRATION   | 3RATION 10 ~ 500Hz, 2G 10min./1cycle, 60 min. each long X,Y, Z axes  |  |  |
|   | MOUNTING  | Compliance to IEC60068-2-6   |  |  |
|   | SAFETY STANDARDS  | UL508  |  |  |
| П   | O'U ETT O'T UID UID   |  |  |  |
| 1   | WITHETAND VOLTACE   | EN60950-1 compliant  |  |  |
|   | WITHSTAND VOLTAGE   | I/P-0/P: 3KVAC   |  |  |
|   | ISOLATION RESISTANCE  | I/P-O/P, I/P-FG, O/P-FG: ≥100M 0hms/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 app |   |  |  |  |
|   |   | 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.   | a ma a mai oquipmona mo intai oquipmona muot be                        |  |
|   | MTDE  |  |  |  |
|   | 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 appointly mentioned are managined at 2  | 201/ AC input roted load and 25°C of ambient temperature               |  |

All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C of ambient temperature.



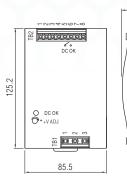
#### **Mechanical Specification**

Terminal Pin No. Assignment (TB1)

| Pin No. | Assignment |
|---------|------------|
| 1       | FG ⊕       |
| 2       | AC/N       |
| 3       | AC/L       |

#### Terminal Pin No. Assignment (TB2)

|         | 0             |
|---------|---------------|
| Pin No. | Assignment    |
| 1,2     | DC OUTPUT +V  |
| 3,4     | DC OUTPUT -V  |
| 5,6     | Relay Contact |
| 7,8     | NC            |

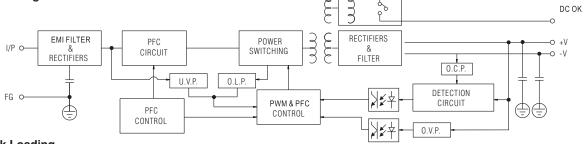




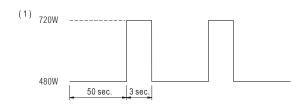
#### **DC OK Relay Contact**

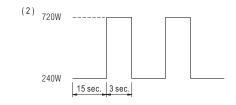
| Contact Close          | When the output voltage reaches the adjusted output voltage. |
|------------------------|--|
| Contact Open           | When the output voltage drop below 90% output voltage.       |
| Contact Ratings (max.) | 30V/1A resistive load  |

## **Block Diagram**

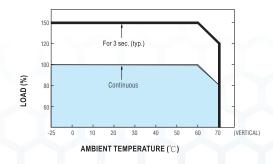


#### **Peak Loading**

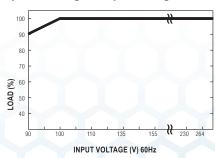




#### **Derating Curve**



#### **Output Derating VS Input Voltage**



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

acc Class 2 Series

PSA Flex Series

PSB Flex Series

PS-S Slim Series

PS Low Profile Series

ps Industrial Series

PSC8M Series

CBI Type

CB Type Chargers

Accessories

Appendix

## **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 DVPDNET-SL
DVPDT01-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 PSS2012 PSW-12024 PS-UPS40 PSC-6024 S8VS-48024A-F PSD-A60W12 96PS-A120WDIN PSD-A60W48 S8JX-G03515CD PSDA40W12 PSD-A40W24