



CONDOR DC POWER SUPPLIES INC.  
2311 STATHAM PKWY  
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## GPFC250 SERIES INSTALLATION INSTRUCTIONS

**MODEL NUMBERS:** GPFC250-X-C where X represents the output voltage which may be any number from 3.3 thru 48, and C indicates optional cover/fan.

### RATINGS:

Input: 100-240 V ac, 6A, 50/60 Hz

Output: Maximum volts = 48 V dc

Maximum current = 50 A

Maximum watts = 180 W convection cooled, 120 W convection cooled for voltages less than 5 Vdc

250 W with cover/fan option or minimum 150 LFM airflow, 165 W for voltages less than 5 Vdc.

- Notes:
1. Maximum ambient temperature for rated output power is 50 °C.
  2. Maximum Operating Relative Humidity 96 %, no condensation.
  3. Storage: -40 to +85 °C. Units should be allowed to warm-up under non-condensing conditions before application of power.



**SAFETY DECLARATION:** Condor DC Power Supplies, Inc. declares under our sole responsibility that all models listed above are in conformity with the applicable requirements of EN60950 following the provisions of the Low Voltage Directive 73/23/EEC. All models are Certified to be in compliance with the applicable requirements of UL/EN/IEC 60950-1 1<sup>st</sup> Ed., CAN/CSA 22.2 No. 60950-1-03 1<sup>st</sup> Ed. (Level 5). They are certified for Pollution Degree 2 environment and Class I TN-S power systems. All DC outputs are SELV under normal and single fault conditions. All outputs are at a Hazardous Energy Level.

**TEMPERATURES:** The maximum operating temperatures of components used in this supply must not be exceeded after installation. The orientation of the supply, output power, ambient temperature and the availability, amount, direction and/or restriction of natural airflow influences the temperatures of these components. Keeping the temperature of the core of T4 below 110°C will usually be sufficient to meet all other temperature requirements.

**GROUNDING:** Protection Class I requires that the chassis and/or TB1-3 be bonded to Protective Earth in the end application. Using TB1-3 for the end product protective earthing terminal is not recommended. A separate dedicated protective earthing point should be used.

**SPACINGS:** The required creepage and clearance distances from primary circuits to ground and secondary circuits must be maintained after installation to preserve the intended safety.

**WARNING! RISK OF FIRE!** A blown internal fuse is an indication of catastrophic failure of circuit component(s). Repair must be performed by Condor authorized personnel.

**WARNING! SHOCK HAZARD!** These supplies use double pole/neutral fusing. Dangerous voltages are present on some components and printed wiring traces.

| EXPLANATION OF SYMBOLS |   |
|------------------------|---|
|                        | Alternating Current                       |
|                        | Direct Current                            |
|                        | Attention, Consult Accompanying Documents |
|                        | Attention, Dangerous Voltages             |
|                        | Earth (Ground)                            |

### CONNECTIONS

| TB1 | AC Input   | TB2 | DC Output  | J2 | Signal Out | FAN |          |
|-----|------------|-----|------------|----|------------|-----|----------|
| L   | AC Line    | 1   | Output (+) | 1  | DC Good    | 1   | 12 V (-) |
| N   | AC Neutral | 2   | Output (+) | 2  | Power Fail | 2   | 12 V (+) |
|     | Earth      | 3   | Return     | 3  | Ext Off    |     |          |
|     |            | 4   | Return     | 4  | + Sense    |     |          |
|     |            |     |            | 5  | - Sense    |     |          |

### MATING CONNECTORS

J2 and FAN: AMP MTA-100 Receptacle

**CAUTION:** Do not exceed 20 A per terminal on terminal Block TB2; 60 A peak on buss bars (3.3 & 5V models).

Condor DC Power Supplies Inc. will not be liable for the safety, reliability or performance of these power supplies if a) any changes, modifications or repairs are carried out by other than authorized agents of Condor DC Power Supplies Inc., or b) the installation of the supply is not in accordance with these installation instructions and the applicable UL, CSA, and EN/IEC safety standards.