CONDOR DC POWER SUPPLIES INC.
2311 STATHAM PKWY
OXNARD, CA 93033 + 805-486-4565

# GPM200 SERIES
# INSTALLATION INSTRUCTIONS

## RATINGS

Input: 100-240 VAC, 5.5 A, 50/60 Hz

Output: Maximum Continuous Output Power at 50°C With external 26 cfm Airflow = 200 W

Standard Models:

| Model | Output #1 [1] | $I_{sc}$ | Output #2 [1] | $I_{sc}$ | Output #3 | $I_{sc}$ | Output #4 [2] | $I_{sc}$ |
|---|---|---|---|---|---|---|---|---|
| GPM200A | +5V 26A[5] | 25A | +12V 8.0A | 15A | -12V 1.2A | 2A | 12V 4.0A | 2A |
| GPM200B | +5V 26A[5] | 25A | +12V 8.0A | 15A | -5V 1.2A | 2A | 12V 4.0A | 2A |
| GPM200D | +5V 26A[5] | 25A | +24V 5.0A | 15A | -12V 1.2A | 2A | 12V 4.0A | 2A |
| GPM200E | +5V 26A[5] | 25A | +24V 5.0A | 15A | -15V 1.2A | 2A | 15V 4.0A | 2A |
| GPM200F | +5V 26A[5] | 25A | +12V 8.0A | 15A | -12V 1.2A | 2A | 5V 4.0A | 2A |

Special Models: (Place Code Letters for desired outputs from Table below; example = GPM200-BAA)

**GPM200-** ( ___ ) ( ___ ) ( ___ )

| Output #1[1] | Output #2 [1] | Output #3 | Output #4 [2] |
|---|---|---|---|
| +5V 26A[5] | B = +12V 8.0A | A = -5V 1.2A Q = -5V 2.4A | A = 5V 4.0A |
| (For all | C = +15V 8.0A | B = -12V 1.2A R = -12V 2.4A | B = 12V 4.0A |
| models) | D = +24V 5.0A | C = -15V 1.2A S = -15V 2.4A | C = 15V 4.0A |
| | | | D = 24V 2.0A |

Notes:
1. The combined loads of Outputs No. 1 and No. 2 must not exceed 32 A.
2. Isolated output which may be referenced as a positive or negative voltage.
3. Maximum Operating Relative Humidity 96%, no condensation.
4. $I_{sc}$ = Maximum output short circuit current.
5. Minimum load current = 4A.

CE **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.

**CERTIFICATION:** All models are Certified to be in compliance with the applicable requirements of UL 2601-1 1st Ed, CSA 22.2 No. 234 (Level 3) (with additional tests to C22.2 No 601.1-M90 per T.I.L. CA-08), IEC 601-1 (1988), EN 60601-1: 1990 and VDE 0750 T1 12.91.

**CLASSIFICATION:** (In accordance with sub-clause 5 of IEC 601-1)

(5.1) Protection against electric shock = Class I
(5.2) Degree of protection against electric shock = Signal output or intermediate
(5.3) Protection against harmful ingress of water = Ordinary (no protection)
(5.5) Has not been evaluated for use in the presence of a flammable anaesthetic mixture with air, oxygen, or nitrous oxide. This evaluation is made on the end equipment by the OEM.
(5.6) Mode of operation = Continuous

**CAUTION:** When performing Dielectric Strength Tests, catastrophic failure of the unit may result if a Dielectric Strength test voltage greater than 1800 Vac is applied between primary and secondary circuits. The components providing isolation from primary to secondary cannot be tested while installed in the power supply without overstressing basic (primary to ground) insulation. All isolating components are individually 100% tested at 4800 Vac prior to installation.

**ISOLATION:** The creepage distance between primary and ground is 4 mm minimum; between primary and secondary circuits is 8 mm minimum. Secondary to ground creepage is not defined or controlled. The output common is bypassed to ground using a capacitor. The required creepage and clearance distances from primary circuits to ground and secondary circuits must be maintained after installation to preserve the intended safety.

**GROUNDING:** The Protective Earth (ground) terminal must be bonded to Protective Earth in the host equipment. Using the Protective Earth terminal on the supply for grounding the host equipment is not recommended. A separate dedicated grounding point should be used.

**OUTPUTS:** All output commons should be connected to Protective Earth in the end application. The output(s) are intended for Protectively Earthed Signal Output and Intermediate Circuits only. The output(s) are not acceptable for patient connection without additional isolation. All DC outputs are SELV under normal and single fault conditions.

**OVERVOLTAGE PROTECTION:** Only output #1 is monitored for an overvoltage condition. The trip-point for a 5 volt output is 5.6 to 6.8 volts. In some applications where an overvoltage condition could result in a hazard as defined in applicable safety standards, redundant or additional overvoltage protection may be required. Consult factory for details.

**TEMPERATURES**: The maximum operating temperatures of certain safety components, as defined in the applicable safety standards, must not be exceeded after installation to preserve the intended safety. The output power, ambient air temperature and the availability, amount, direction and/or restriction of airflow influence the temperatures of these components.

**OVERCURRENT PROTECTION:** The internal fuse is located in the phase lead only. EN 60601-1 requires that both supply leads (phase and neutral) be protected against overcurrent. Complete overcurrent protection must be provided in the host equipment. Fuse ratings must not exceed that specified for the internal fuse, must meet the requirements of EN 60601-1 and be acceptable for the country in which the host equipment is to be installed.

**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. Refer to fuse marking on the supply for rating.

**WARNING! SHOCK HAZARD!** Dangerous voltages are present on some components, printed wiring traces and heatsinks.

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

## C O N N E C T I O N S

| TB1 | AC INPUT | J2 | CONTROL CONNECTOR | TB2 | DC OUTPUTS |
|---|---|---|---|---|---|
| 1 | Line | 1 | Power Fail | 1,2 | Output #1 (+) |
| 2 | Neutral | 2 | Output #1 (-) Sense | 3,4,5 | Common (Return) |
| 3 | Ground | 3 | Output #1 (+) Sense | 6 | Output #2 (+) |
| | | 4 | No Connection | 7 | Output #3 (-) |
| J2 Mating Connector = Amp 64044x-4 where x = 0 to 4 | | | | 8 | Output #4 (+) |
| **WARNING**: Do not exceed 15A per terminal on TB2 | | | | 9 | Output #4 (-) |

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/or IEC safety standards.