



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

## GSM28 SERIES INSTALLATION INSTRUCTIONS

### RATINGS

Input: 100-240 VAC, 0.9 A, 50/60 Hz.

Output:

| Model    | Volts  | Amps   |        |
|----------|--------|--------|--------|
|          |        | Note 1 | Note 2 |
| GSM28-5  | + 5.1V | 5.0A   | 4.0A   |
| GSM28-12 | +12.0V | 2.3A   | 2.0A   |
| GSM28-15 | +15.0V | 1.9A   | 1.6A   |
| GSM28-24 | +24.0V | 1.2A   | 1.0A   |
| GSM28-28 | +28.0V | 1.0A   | 0.86A  |

- Notes:
1. Maximum output current at 50°C ambient.
  2. Maximum output current with chassis/cover option at 50°C ambient.
  3. Maximum Relative Humidity 96%, no condensation

**SAFETY COMPLIANCE STANDARDS:** All models are Certified to be in compliance with the applicable requirements of UL 2601-1 First Edition, CSA 22.2 No. 601.1, and IEC601-1 1988 Amend. 2.

**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) Have 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



**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.

### **⚡⚡⚡ WARNING! RISK OF FIRE! SHOCK HAZARD! ⚡⚡⚡**

Dangerous voltages are present on some components, printed wiring traces and heatsinks.

**GROUNDING:** To maintain proper isolation between mains and output, the ground terminal, J1 Pin1, must be bonded to Protective Earth in the end application. However, using this terminal for the primary system earthing terminal is not recommended. Alternatively, #4 screws (max 0.22 inch head diameter) and metal spacers (3/16 inch diameter, 1/4 inch minimum length) may be used to mount the power supply to grounded metal surfaces (Protective Earth).

A blown fuse is an indication of catastrophic failure of circuit component(s). Repair must be performed by Condor authorized personnel.





**OUTPUTS:** Either the + or - output should be connected to Protective Earth in the end application. The output is intended for Protectively Earthed Signal Output and Intermediate Circuits only. The output is not acceptable for patient connection without additional isolation. The DC output is SELV under normal and single fault conditions.

**OVERVOLTAGE PROTECTION:** The output is monitored for an overvoltage condition. 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.

**DIELECTRIC STRENGTH TEST 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.

**MAINTAINING 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. Each output line is bypassed to ground using a 0.01µF 500V capacitor (0.02µF total, output to ground). The required creepage and clearance distances from primary circuits to ground and secondary circuits must be maintained after installation to preserve the intended safety.

**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.

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

### CONNECTIONS

| J1 Pin | AC Input | J2 Pin | DC Output |
|--------|----------|--------|-----------|
| 1      | Ground   | 1      | Common    |
| 3      | Neutral  | 2      | Common    |
| 5      | Line     | 3      | +Output   |
|        |          | 4      | +Output   |

| MATING CONNECTORS |                      |
|-------------------|----------------------|
| J1                | AMP Housing 644329-5 |
| J2                | AMP Housing 644329-4 |

**CAUTION:** Do not exceed 5 Amps per contact.

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, IEC safety standards.