

## DESCRIPTION

## PRODUCT COVERED:

USR/CNR, Switching Power Supply, Model GLC50 followed by suffixes A, B, D, G, or -X where X may be any number from 3.3 thru 48, and Model SP1694. May or may not be followed by -C.

## ELECTRICAL RATINGS:

Input: 100-240 V ac, 50/60 Hz, 1.4 A.

Outputs: Maximum output 8 A or 50 W with convection cooling. Refer to ratings below for multi-output models and standard voltage models.

Maximum output 8 A or 50 W for -C option with 12 cfm minimum airflow.

| Output<br>MODEL | #1   |     | #2  |     | #3  |     |
|-----------------|------|-----|-----|-----|-----|-----|
|                 | V    | A   | V   | A   | V   | A   |
| GLC50A          | 5.05 | 4.0 | +12 | 2.5 | -12 | 0.2 |
| GLC50B          | 5.05 | 4.0 | +15 | 2.5 | -15 | 0.2 |
| GLC50D          | 5.05 | 4.0 | +24 | 1.5 | -12 | 0.2 |
| GLC50G          | 3.3  | 4.0 | +12 | 2.5 | -12 | 0.2 |
| GLC50-3.3       | 3.3  | 8.0 |     |     |     |     |
| GLC50-5         | 5.1  | 8.0 |     |     |     |     |
| GLC50-12        | 12.0 | 4.2 |     |     |     |     |
| GLC50-15        | 15.0 | 3.3 |     |     |     |     |
| GLC50-24        | 24.0 | 2.1 |     |     |     |     |
| SP1694          | 24.0 | 1.4 |     |     |     |     |
| GLC50-28        | 28.0 | 1.8 |     |     |     |     |
| GLC50-48        | 48.0 | 1.1 |     |     |     |     |

## ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

This product is for use only in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

**USR/CNR indicates investigation to the U.S. and Canadian (Bi-National) Standard for Safety of Information Technology Equipment - Safety - Part 1: General Requirements, CSA C22.2 No. 60950-1-03 \* UL 60950-1, First Edition.**

The equipment is for building in, Class I (earthed), for use on a TN power system.

Conditions of Acceptability - When installed in the end-use equipment, the following are among the considerations to be made:

1. **This component has been judged on the basis of the required spacings in the Standard for Information Technology Equipment - Safety - Part 1: General Requirements, CSA C22.2 No. 60950-1-03 \* UL 60950-1, First Edition, which would cover the component itself if submitted for unrestricted listing.**
2. All secondary output circuits are SELV and are not hazardous energy levels.
3. The terminals and connectors have not been evaluated for field wiring.
4. **The power supply shall be properly bonded to the main protective earthing termination in the end product as this unit was investigated for Class I construction as defined in UL 60950-1. An additional evaluation shall be made if the power supply is intended for use in other than Class I equipment.**
5. Bonding terminals provided on this equipment have not been evaluated as protective earthing terminals.
6. Magnetic device transformer T2 employs an OBJY2 electrical insulation system designated Class F. Inductor T1 employs bobbin material rated 150°C in the thickness used.
7. The equipment has been evaluated for use in a Pollution Degree 2 environment.
8. The component shall be installed in compliance with the enclosure, mounting, spacing, casualty markings and segregation requirements of the end-use application.
9. This power supply was evaluated for use in a 50°C ambient. An additional evaluation should be made if the power supply is intended to be used in an elevated ambient.
10. **All power supplies, except Models GLC50-3.3 and GLC50-5 comply with the Limited Power Source requirement in Clause 2.5 of UL 60950-1.**



# CERTIFICATE

No. B 05 11 14549 262

Holder of Certificate: **Condor DC Power Supplies, Inc.**

2311 Statham Parkway  
Oxnard, CA 93033  
USA

Production Facility(ies):

16784, 52962

Certification Mark:



Product:

**Power supplies  
AC / DC Switching Power Supply**

Model(s):

**GLC50 Series (with additional suffixes)  
SP1694**

Parameters:

Rated Input Voltage: 100 - 240 VAC  
Rated Frequency: 50 / 60 Hz  
Rated Input Current: 1.4 A  
Protection Class: I (at end-use)  
Rated Output Voltage: (see attachment)  
Rated Output Current: (see attachment)

Conditions of Acceptability:  
When installing the equipment, all requirements of the specified standard must be met.  
Spacings and other requirements shall be maintained after installation at end-use per standard mentioned below.

This model requires:  
1) A suitable electrical and fire enclosure at end use.  
2) Maximum operating ambient shall not exceed 50 °C.  
3) Maximum total DC output power not to exceed 50 W.  
4) Grounding Terminal must be connected to reliable earth connection.  
5) Spacings and other requirements shall be maintained after installation at end-use.

Tested according to: EN 60950-1/A11:2004

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. See also notes overleaf.

Test report no.: SI500149-118

Date, 2005-12-01

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*William A. Wauthers*



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ATTACHMENT TO CERTIFICATE NO. B 05 11 144549 262  
FOR CONDOR DC POWER SUPPLIES, INC.



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

SP1694  
INSTALLATION INSTRUCTIONS

**RATINGS:**

Input: 100-240 V ac, 1.4 A, 50/60 Hz  
Output: 24 V dc, 1.375 A

**Notes:**

1. Maximum operating ambient is 60°C.
2. Maximum Relative Humidity 95%, 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 EN 60950-1 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 60950-1, CSA 60950-1 (UL3MI), and EN 60950-1, for Pollution Degree 2 environment and Class I TN-S power systems. The outputs of the supplies meet the requirements for SELV and are not an energy hazard.

**GROUNDING:** The ground terminal must be bonded to Earth in the end application. Using this terminal for the primary system earthing terminal is not recommended.

**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.

**WARNING! RISK OF FIRE!** A blown fuse is an indication of catastrophic failure of circuit components. Repair must be performed by Condor authorized personnel. Fuse F1 must be replaced with 1.2 A 250 V (slow blow), UL Listed and CSA Certified type.

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

**CONNECTIONS**

| J1 Pin | AC Input |
|--------|----------|
| 1      | Line     |
| 3      | Neutral  |

| J2 Pin | DC Output     |
|--------|---------------|
| 1      | Output #1 (+) |
| 2      | Output #1 (-) |
| 3      | Output #1 (+) |
| 4      | Return        |
| 5      | Return        |
| 6      | Return        |

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

**MATING CONNECTORS**

|    |                      |                |
|----|----------------------|----------------|
| J1 | Amp Housing 640250-3 | Contact 770522 |
| J2 | Amp Housing 640250-6 | Contact 770522 |

**CAUTION**

Do not exceed 5 A per contact.

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

SP1694 (Rev. 02/21/05)

Report Reference Number: SI500149-118

*William Wauthoit*  
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2005-12-01



**ATTACHMENT TO CERTIFICATE NO. B 05 11 144549 262  
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**CONDOR**  
CONDOR DC POWER SUPPLIES INC.  
2311 STATHAM PKWY  
OXNARD, CA 93033 + 805-486-4565

**INSTALLATION INSTRUCTIONS  
GLC50 SINGLE OUTPUT SERIES**

**MODEL NUMBERS:** GLC50-X, where X represents the output voltage which may be any number from 3.3 thru 48. Model may be followed by suffix -C for chassis & cover option

**RATINGS:**

Input 100-240 Vac, 1.4 A, 50/60 Hz

Output 8 A or 50 W maximum or see table for standard output voltage models

| Model     | Watts <sup>1</sup> | Output        | Model    | Watts <sup>1</sup> | Output        |
|-----------|--------------------|---------------|----------|--------------------|---------------|
| GLC50-3.3 | 26.4               | 3.3 V dc 8 A  | GLC50-24 | 50                 | 24 V dc 2.1 A |
| GLC50-5   | 40                 | 5.1 V dc 8 A  | GLC50-28 | 50                 | 28 V dc 1.8 A |
| GLC50-12  | 50                 | 12 V dc 4.2 A | GLC50-48 | 50                 | 48 V dc 1.1 A |
| GLC50-15  | 50                 | 15 V dc 3.3 A |          |                    |               |

**Notes**

- C option requires 12 cfm minimum airflow for full rated output power
- Maximum operating ambient is 50 °C
- Maximum Relative Humidity 96 %, no condensation
- Storage -40 to +85 °C. Units should be allowed to warm-up under non-condensing conditions before application of power

**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 IEC 60950-1 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 60950-1, CSA 60950-1 (1.3M), and IEC 60950-1, for Pollution Degree 2 environment and Class II/III power systems. The outputs of the supplies meet the requirements for SELV and are not an energy hazard.

**GROUNDING:** The ground terminal must be bonded to Earth in the end application. Using this terminal for the primary system earthing terminal is not recommended.

**CHASSIS AND COVER INSTALLATION:** The insulator provided with the chassis and cover must be installed on the J1 side of the enclosure. Creepage and clearance distances from primary circuits to ground and secondary circuits, as defined in the applicable safety standards, 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.

**WARNING! RISK OF FIRE!** A blown fuse is an indication of catastrophic failure of circuit components. Repair must be performed by Condor authorized personnel. Fuse F1 must be replaced with 1.2 A 250 V (slow blow) UL Listed and CSA Certified type.

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

**CONNECTIONS**

| J1 Pin | AC Input | J2 Pin | DC Output  |
|--------|----------|--------|------------|
| 1      | Line     | 1      | Output (+) |
| 3      | Neutral  | 2      | Output (+) |
|        |          | 3      | Output (+) |
|        |          | 4      | Return     |
|        |          | 5      | Return     |
|        |          | 6      | Return     |

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

| MATING CONNECTORS |                      |                |
|-------------------|----------------------|----------------|
| J1                | Amp Housing 640250-3 | Contact 770522 |
| J2                | Amp Housing 640250-6 | Contact 770522 |

**CAUTION**  
Do not exceed 5 A 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 and/or EN safety standards.

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2005-12-01



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

**INSTALLATION INSTRUCTIONS  
GLC50 MULTI OUTPUT SERIES**

**RATINGS**

Input: 100-240 VAC, 1.4 A, 50/60 Hz

Output:

| Model <sup>1</sup> | Watts <sup>2</sup> | Output #1   | Output #2   | Output #3   |
|--------------------|--------------------|-------------|-------------|-------------|
| GLC50A             | 50                 | +5.05VDC 4A | +12VDC 2.5A | -12VDC 0.2A |
| GLC50B             | 50                 | +5.05VDC 4A | +15VDC 2.5A | -15VDC 0.2A |
| GLC50D             | 50                 | +5.05VDC 4A | +24VDC 1.5A | -12VDC 0.2A |
| GLC50G             | 50                 | +3.3VDC 4A  | +12VDC 2.5A | -12VDC 0.2A |

Notes:

- 1 Model may be followed by -C for Chassis & Cover option
- 2 -C option requires 24 cfm minimum airflow for full rated output power
- 3 Maximum operating ambient is 50°C
- 4 Maximum Relative Humidity 96% w/ no condensation



**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 EN IEC 60950-1 1<sup>st</sup> Ed., CSA 22.2 No. 60950-1-03 1<sup>st</sup> Ed. for Pollution Degree 2 environment and Class II TN-S power systems. The outputs of the supplies meet the requirements for SELV and are not an energy hazard.

The ground terminal must be bonded to Earth in the end application. Using this terminal for the primary system earthing terminal is not recommended.

**CHASSIS AND COVER INSTALLATION** The insulator provided with the chassis and cover must be installed on the J1 side of the enclosure. Creepage and clearance distances from primary circuits to ground and secondary circuits, as defined in the applicable safety standards, must be maintained after installation to preserve the intended safety.

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**WARNING! RISK OF FIRE!**

A blown fuse is an indication of catastrophic failure of circuit components. Repair must be performed by Condor authorized personnel. Fuse F1 must be replaced with 1.2A 250V (slow blow), UL Listed and CSA Certified type.

**CONNECTIONS**

| J1 Pin | AC Input | J2 Pin | DC Output    |
|--------|----------|--------|--------------|
| 1      | Line     | 1      | Output 2 (+) |
| 3      | Neutral  | 2      | Output 1 (+) |
|        |          | 3      | Output 1 (-) |
|        |          | 4      | Common       |
|        |          | 5      | Common       |
|        |          | 6      | Output 3 (+) |

**MATING CONNECTORS**

|    |                                     |
|----|-------------------------------------|
| J1 | Amp Housing 640250-3 Contact 770522 |
| J2 | Amp Housing 640250-6 Contact 770522 |

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*William A. Wentz*  
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