

File E135803
Project 97SC15289

January 21, 1998

REPORT

ON

COMPONENT - POWER SUPPLIES, INFORMATION TECHNOLOGY EQUIPMENT, INCLUDING
ELECTRICAL BUSINESS EQUIPMENT

Condor DC Power Supplies Inc.
Oxnord, CA

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DESCRIPTION

PRODUCT COVERED:

USR, CNR Switching Power Supply, Models GPFC160-X (where X is any number from 5-48), SP1669, SP1722 and SP1732. Suffix -CF may be included.

ELECTRICAL RATINGS:

Input: 100-240 V ac, 50/60 Hz, 2.5 A.

Outputs: Refer to table for standard output voltage models.

5 - 11.5 V @ 25 A or 127.5 W convection cooled; 31.3 A or 160 W with 26 cfm airflow and suffix -CF.

11.6 - 48 V @ 11.7 A or 140 W convection cooled; 13.3 A or 160 W with 26 cfm airflow and suffix -CF

MODEL	CONVECTION COOLED	26 CFM AIRFLOW or COVER/FAN OPTION (Suffix -CF)
GPFC160-5	5.1 Vdc, 25 A	5.1 Vdc, 31.3 A
GPFC160-9	9 Vdc, 11.7 A	9 Vdc, 13.3 A
GPFC160-12	12 Vdc, 11.7 A	12 Vdc, 13.3 A
GPFC160-15	15 Vdc, 9.3 A	15 Vdc, 10.7 A
GPFC160-24	24 Vdc, 5.8 A	24 Vdc, 6.7 A
GPFC160-28	28 Vdc, 5.0 A	28 Vdc, 5.7 A
GPFC160-48	48 Vdc, 2.9 A	48 Vdc, 3.4 A
SP1669	5.1 Vdc, 25 A	5.1 Vdc, 31.3 A
SP1722	24 Vdc, 5.8 A	24 Vdc, 6.7 A
SP1732	6.4 Vdc, 20 A	6.4 Vdc, 25 A

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 Information Technology Equipment - Safety- Part 1: General Requirements, CAN/CSA 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, CAN/CSA 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 T4 employs an OBJY2 electrical insulation system designated Class F. Inductor T3 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.



Certificate of Compliance

Certificate: 1212969 (LR 46516C)

Master Contract: 150684

Project: 1718739

Date Issued: 2005/10/12

Issued to: **Condor D.C. Power Supplies Inc.**

2311 Statham Pky
Oxnard, CA 93033
USA

Attention: Mr. Dave Hemphill

The products listed below are eligible to bear the CSA Mark shown



Issued by: Eugen Velea, MAsc. E.Eng.

Authorized by: Shane Stevenson, Product
Group Manager

PRODUCTS

CLASS 5311 07 - POWER SUPPLIES - Component Type - (CSA 60950-1-03)

Component type power supplies for use with Information Technology and Electrical Business Equipment where the suitability of the combination is determined by CSA International.

Models GPFC160-X-CF, where "X" represents the output voltage, which may be any number from 5 thru 48, and "CF" indicates optional cover/fan. Input rated: 100-240 V, 50/60 Hz, 2.5 A; Output rated: Maximum 48 V dc, Maximum Current = 25 A (convection cooled) or 31.3 A with 26 CFM airflow or optional cover/fan.

Notes:

1. Protection in Class I equipment requires that the ground terminal be bonded to Protective Earth in the end-use



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Master Contract: 150684

Project: 1718739

Date Issued: 2005/10/12

equipment. Using the ground terminal in this power supply for the primary system earthing terminal is not acceptable.

2. Evaluated for use in a 50°C ambient.

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 60950-01-03 - Safety of Information Technology Equipment – Part 1: General Requirements



Supplement to Certificate of Compliance

Certificate: 1212969

Master Contract: 150684

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
1718739	2005/10/12	Update Report 1212969 to Remove Model SP1732 and upgrade to CSA 60950-1.
History		
1212969	May 16, 2002	Original Certification. (Re-issued Report LR46516-271C as Report 1212969 and updated to add Models GPFC160-6, -48 and SP1732, and to revise model designations.



America

CERTIFICATE

No. B 09 07 59743 040

Holder of Certificate: **SL Power Electronics, Corp.**



6050 King Drive Bldg A
Ventura CA 93003
USA

Production Facility(ies):

16784, 52962

Certification Mark:



Product:

**Switching power supply unit
(AC / DC Switching Power Supply)**

Model(s):

SP1732, SP1669, and GPFC160-x Series.
(Where x represents the output voltage, which may be any number from 5 thru 48. May be followed by suffix -CF, when used, indicates optional cover/fan is provided, and/or suffix "G" indicating RoHS version)

Parameters:

Input Voltage, AC:	100-240 V
Input Frequency:	50/60 Hz
Input Current:	2.5 A
Protection Class:	I (at end use)
Output(s), DC:	See attachments
For further information please attachments.	

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

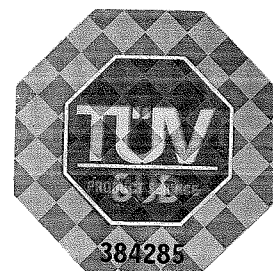
The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.:

095-900004105-000

Date, 2009-07-27

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ATTACHMENT TO CERTIFICATE NO. B 09 07 59743 040 FOR SL POWER ELECTRONICS, CORP.



America

GENERAL PRODUCT INFORMATION:

The equipment covered by this report are component AC/DC Switching Power Supply Units that are intended for use in Information Technology Equipment.

OUTPUT(S), DC:

GPFC 160 Series

5 thru 11.5 V at 25 A or 127.5 W convection cooled; 31.3 A or 160 W with 26 cfm airflow and suffix -CF;
11.6 thru 48 V at 11.7 A or 140 W convection cooled; 13.3 A or 160 W with 26 cfm airflow and suffix -CF

MODEL	Convection Cooled	26 CFM Airflow or Cover/Fan option (Suffix -CF)
GPFC160-5	5.1 V dc 25 A	5.1 V dc 31.3 A
GPFC160-12	12 V dc 11.7 A	12 V dc 13.3 A
GPFC160-15	15 V dc 9.3 A	15 V dc 10.7 A
GPFC160-24	24 V dc 5.8 A	24 V dc 6.7 A
GPFC160-28	28 V dc 5.0 A	28 V dc 5.7 A
GPFC160-48	48 V dc 2.9 A	48 V dc 3.4 A

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.

SP 1669

Maximum ambient temperature for rated output power is 50°C.

Cooling >>>		Convection		See Note 1	
Model	Voltage	Amperes	Watts	Amperes	Watts
SP1669	5.1 V	25.0	127.5	31.3	160

Notes:

1. With cover/fan option or 26 cfm airflow.
2. Maximum Operating Relative Humidity 96%, no condensation.

SP1732

Maximum ambient temperature for rated output power is 50°C.

Maximum Operating Relative Humidity 96%, no condensation.

Cooling >>		Convection		26 cfm	
Model	Voltage	Amperes	Watts	Amperes	Watts
SP1732	6.4	20	128	25	160

Notes:

1. None

William A. Wenthart

ATTACHMENT TO CERTIFICATE NO. B 09 07 59743 040
 FOR SL POWER ELECTRONICS, CORP.



America

CONDITIONS OF ACCEPTABILITY:

When installing the equipment, all requirements of the manufacturer's installations instructions and end product specified standard must be met. These models require:

- 1) A suitable electrical and fire enclosure at end use.
- 2) Reliable Protective Earthing (PE) and protective bonding connections to be supplied and evaluated in the end-product system.
- 3) All secondary output circuits are SELV and are not hazardous energy levels.
- 4) The terminals and connectors have not been evaluated for field wiring.
- 5) Bonding terminals provided on this equipment have not been evaluated as protective earthing terminals.
- 6) Magnetic device transformer T4 employs an electrical insulation system designated Class F. Inductor T3 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.

William A. Westhead

Rpt. Ref. No.: 095-900004105-000

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Date: 2009-07-27



Ref. Certif. No.

DE 3 - 58166

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST
CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE)
CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE
CERTIFICATS D'ESSAIS DES EQUIPEMENTS
ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE CERTIFICAT D'ESSAI OC

Product
Produit

Switching power supply unit
(AC / DC Switching Power Supply)

Name and address of the applicant
Nom et adresse du demandeur

SL Power Electronics, Corp.
6050 King Drive Bldg A
Ventura CA 93003, USA

Name and address of the manufacturer
Nom et adresse du fabricant

SL Power Electronics, Corp., 6050 King Drive Bldg A, Ventura CA
93003, USA

Name and address of the factory
Nom et adresse de l'usine

Industrias SL S.A. de C.V., Calle Costa Rica No. 60, Mexicali,
Baja California, 21200 Col. Cuauhtemoc, MEXICO
For further information please see attachment

Rating and principal characteristics
Valeurs nominales et caractéristiques principales

Input Voltage, AC: 100-240 V
Input Frequency: 50/60 Hz
Input Current: 2.5 A
Protection Class: I (at end use)
Output(s), DC: See attachments
For further information please attachments.

Trade mark (if any)
Marque de fabrique (si elle existe)

CONDOR

Model/type Ref.
Ref. de type

SP1732, SP1669, and GPFC160-x Series.
(Where x represents the output voltage, which may be
any number from 5 thru 48. May be followed by suffix
-CF, when used, indicates optional cover/fan is provided,
and/or suffix "G" indicating RoHS version)

Additional information (if necessary)
Information complémentaire (si nécessaire)

SMT

A sample of the product was tested and found
to be in conformity with

IEC 60950-1:2001

Un échantillon de ce produit a été essayé et a été
considéré conforme à la

as shown in the Test Report Ref. No.
which form part of this certificate
comme indiqué dans le Rapport d'essais numéro
de référence qui constitue une partie de ce
certificat

095-900004105-000

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme **National de Certification**

Date, 2009-07-28
CB 09 07 59743 039

William Wenthold



TÜV SÜD Product Service GmbH · Certification Body · Ridlerstrasse 65 · D-80339 München

Product Service

Additional factory information:

Name and address of the factory (52962) Shanghai GES Information Technology Co. Ltd.
Nom et adresse de l'usine Zhangjiang Hi-Tech Park
 No. 668 Li Shi Zhen Rd.
 Shanghai, 201203 Pudong
 PEOPLE'S REPUBLIC OF CHINA

GENERAL PRODUCT INFORMATION:

The equipment covered by this report are component AC/DC Switching Power Supply Units that are intended for use in Information Technology Equipment.

OUTPUT(S), DC:**GPFC 160 Series**

5 thru 11.5 V at 25 A or 127.5 W convection cooled; 31.3 A or 160 W with 26 cfm airflow and suffix -CF;
 11.6 thru 48 V at 11.7 A or 140 W convection cooled; 13.3 A or 160 W with 26 cfm airflow and suffix -CF

MODEL	Convection Cooled	26 CFM Airflow or Cover/Fan option (Suffix -CF)
GPFC160-5	5.1 V dc 25 A	5.1 V dc 31.3 A
GPFC160-12	12 V dc 11.7 A	12 V dc 13.3 A
GPFC160-15	15 V dc 9.3 A	15 V dc 10.7 A
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GPFC160-28	28 V dc 5.0 A	28 V dc 5.7 A
GPFC160-48	48 V dc 2.9 A	48 V dc 3.4 A

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.

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 Report No.: 095-900004105-000
 CB 09 07 59743 039
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William A. Wenthold
 William A. Wenthold



Product Service

SP 1669

Maximum ambient temperature for rated output power is 50°C.

Cooling >>>		Convection		See Note 1	
Model	Voltage	Amperes	Watts	Amperes	Watts
SP1669	5.1 V	25.0	127.5	31.3	160

Notes:

1. With cover/fan option or 26 cfm airflow.
2. Maximum Operating Relative Humidity 96%, no condensation.

SP1732

Maximum ambient temperature for rated output power is 50°C.

Maximum Operating Relative Humidity 96%, no condensation.

Cooling >>		Convection		26 cfm	
Model	Voltage	Amperes	Watts	Amperes	Watts
SP1732	6.4	20	128	25	160

Notes:

1. None