



Ref. Certif. No.

US/8346/UL

IEC SYSTEM FOR CONFORMITY TESTING AND CERTIFICATION OF ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

SYSTEME CEI D'ESSAIS DE CONFORMITE ET DE CERTIFICATION DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE CERTIFICAT D'ESSAI OC

Product
Produit

DC Power Supplies

Name and address of the applicant
Nom et adresse du demandeur

Condor D C Power Supplies Inc.
2311 Statham Pky
Oxnard, CA 93033, USA

Name and address of the manufacturer
Nom et adresse du fabricant

Condor D C Power Supplies Inc.
2311 Statham Pky
Oxnard, CA 93033, USA

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

1. Industrias S L S A de C V, Costa Rica #60
Col Cuahutemoc, Mexicali, Baja California N, Mexico
2. Flash Electronics Inc. (Shanghai) No. 2 Guatang Road, W E D Z
Wujiang City, Suzhou Jiangsu Province, China

Rating and principal characteristics
Valeurs nominales et caractéristiques principales

Input: 100-240 V ac, 0.90 A, 50/60 Hz
Output: 5 V dc min., 28 V dc max.; 5.0 A max., 0.86 A min. or 28 W max. without chassis/cover option or 24 W max. with chassis/cover option or
See CB Test Report for details.

Trademark (if any)
Marque de fabrique (si elle existe)

CONDOR

Model / Type Ref.
Ref. de type

GSM28-X-C, where X represents the output voltage, which may be any number from 5 through 28. Suffix -C, when used, indicates optional chassis/cover is provided.

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

The Test Report comprises 6 enclosures.

A sample of the product was tested and found to be in conformity with
Un échantillon de ce produit a été essayé et a été considéré conforme à la

PUBLICATION

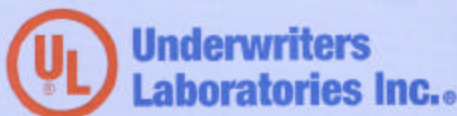
EDITION

IEC 60601-1 (1988) Second Edition, with Amendment No. 1 (1991) and No. 2 (1995) with the exception of: Clause 36, Electromagnetic Compatibility, Clause 48, Biocompatibility, and Clause 52.1, Programmable Electronic Systems. Inclusive of CENELEC Common Modifications. See Test Report for National Differences.

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

E116994-A13-CB-1

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



Underwriters Laboratories Inc. / Certification Programs Office
333 Pfingsten Road, Northbrook, IL 60062-2096
United States of America
TEL INT* 1-847-272-8800, Ext. 43008 FAX INT* 1-847-272-9562
email: jolanta.m.wroblewska@us.ul.com

Date:
Issued: 2004 May 24

Signature:
Jolanta M. Wroblewska

D E S C R I P T I O N

PRODUCT COVERED:

Component - Switching Power Supplies, Medical and Dental,
Models GSM28 followed by suffixes -5, -12, -15, -24 or -28.

ELECTRICAL RATINGS:

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

Outputs:	GSM28-5	5 V, 5.0 A
	GSM28-12	12 V, 2.3 A
	GSM28-15	15 V, 1.9 A
	GSM28-24	24 V, 1.2 A
	GSM28-28	28 V, 1.0 A

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

For use in product where the acceptability of the
combination is determined by Underwriters Laboratories Inc.

This product was evaluated to the First Edition of the
Standard For Medical Electrical Equipment, Part 1: General
Requirements for Safety, UL 2601-1. An insulation diagram is
provided as ILL. 1 and the manufacturer's installation
instructions is provided as ILL. 4.

Condition 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 First Edition of the Standards for Medical Electrical Equipment, Part 1: General Requirements for Safety, UL 2601-1, which covers the end use product for which the component is designed.
2. The component shall be installed in compliance with the enclosure, mounting, spacing, casualty markings and segregation requirements of the end-use application.
3. Consideration should be given to measuring the temperature on power electronic components and transformer windings when the power supply is installed in the end-use equipment.
4. The input/output connectors are not acceptable for field connections, they are only intended for connection to mating connectors of internal wiring inside the end-use machine.
5. The output circuits have not been evaluated for direct patient connection (Type B, BF or CF).
6. The component should be properly bonded to ground in the end-use equipment.
7. The Temperature Test was performed in a raised ambient of 50°C.
8. The main isolation transformer, T2, complies with Class 155 limits.

9. Leakage current testing should be repeated in the end product application.
10. The power supply was evaluated as Reinforced insulation between primary and secondary and Basic insulation between primary to ground.
11. This power supply has been evaluated as Class I, continuous operation, ordinary equipment and has not been evaluated for use in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide.
12. Under normal and single fault conditions, the outputs do not exceed 25 V ac or 60 V dc.



CSA INTERNATIONAL

Certificate of Compliance

Certificate: 1728957 (LR 46516-260C)

Master Contract: 150684

Project: 1728957

Date Issued: 2006/01/27

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

2311 Statham Pky
Oxnard, CA 93033
USA

Attention: Mr. Ross Sacolles

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



Issued by: Eugen Velea, M.A.Sc. E.Eng.

Authorized by: Shane Stevenson, Product
Group Manager

PRODUCTS

CLASS 5311 20 - POWER SUPPLIES - Component Type - For Use in Medical Equipment

Model Numbers:

GSM28-X-C, where X represents the output voltage, which may be any number from 5 through 28. Suffix -C, when used, indicates optional chassis/cover is provided.

Ratings:

Input: 100-240 V ac, 0.90 A, 50/60 Hz.



Certificate: 1728957 (LR 46516-260C)

Master Contract: 150684

Project: 1728957

Date Issued: 2006/01/27

Output: 5 V dc minimum, 28 V dc maximum

5.0 A maximum, 0.86 A minimum or

28 W maximum without chassis/cover option or

24 W maximum with chassis/cover option (suffix -C) or see table for standard voltage models.

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

Notes:

1. Maximum output current at 50 °C ambient.
2. Maximum output current with chassis/cover option (suffix -C) at 50 °C ambient.
3. Maximum Operating Relative Humidity 96%, no condensation.
4. Storage: -40 to +85 °C. Units should be allowed to warm-up under non-condensing conditions before application of power.
5. The outputs are intended for Signal Output and Intermediate Circuits only. The outputs are not acceptable for patient connection without additional isolation.
6. The outputs are SELV (L3M1) during normal and single fault conditions.
7. The isolation voltage from primary to secondary is 4000 VAC. The creepage distance between primary and secondary circuits is 8 mm minimum.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 601.1: Medical Electrical Equipment, Part 1: General Requirements for Safety



CERTIFICATE

No. B 04 03 14549 032

Holder of Certificate: Condor DC Power Supplies, Inc.

2311 Statham Parkway
Oxnard, CA 93033
USA

Certification Mark:



Product: Switching power supply unit

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.: SI400305-112



134619

Date, 2004-04-01

Page 1 of 3



CERTIFICATE
No. B 04 03 14549 032

Model(s): **GSM28 Series**

Parameters:

Rated Input Voltage:	100-240 VAC
Rated Frequency:	50/60 Hz
Rated Input Current:	0.90 A
Rated Output Voltage:	See Attachment
Rated Output Current:	See Attachment
Protection Class:	I

Tested according to: EN 60601-1: 1990/A13:1996

Production Facility(ies): 16784, 51368

Page 2 of 3

A handwritten signature in black ink, appearing to be 'J. S. ...', located below the page number.



**Attachment for Certificate No. B 04 03 14549 032
for Condor DC Power Supplies, Inc.
Models GSM28 Series**

Model Numbers: GSM28-X-C, where X represents the output voltage, which may be any number from 5 through 28. Suffix -C, when used, indicates optional chassis/cover is provided

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

- Notes:
1. Maximum output current at 50° C ambient.
 2. Maximum output current with chassis/cover option at 50°C ambient.
 3. Maximum Operating Relative Humidity 96%, no condensation.
 5. Storage: -40 to +85°C. Units should be allowed to warm-up under non-condensing conditions before application of power.
 6. Protection against electric shock=Class I.
 7. Degree of protection against electric shock=Signal output or intermediate.
 8. Protection against harmful ingress of water= Ordinary (no protection).
 9. Have not been evaluated for use in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide. This evaluation is made on the end equipment by the OEM.
 10. Mode of operation = Continuous.

3/25/2004

Page 3 of 3

