IEC IECEE CB SCHEME

Ref. Certif. No.

CA/7051/CSA

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

Product Produit	Component Type Switching Power Supplies
Name and address of the applicant Nom et adresse du demandeur	Condor DC Power Supplies, Inc. 2311 Statham Parkway Oxnard, CA 93033 USA
Name and address of the manufacturer Nom et adresse du fabricant	Same as applicant
Name and address of the factory Nom et adresse de l'usine Note: *When more than one factory, please report on page 2* Note: *Lorsque il y plus d'une usine, veuillez utiliser la 2ème page*	Industrias SL, S.A. de C.V., Costa Rica No. 60, col. Cuahutemoc, Mexicali B.C. Mexico
Ratings and principal characteristics Valeurs nominales et caractéristiques principales	Input rated 100-240 V ac, 50/60 Hz, 18.0 A; dc outputs rated +48 V/25 A, +12 V/0.3 A.
Trademark (if any) Marque de fabrique (si elle existe)	CONDOR
Model / Type Ref Ref. De type	GPFM1200-48
Additional information (if necessary may also be reported on page 2) Les informations complémentaires (si nécessaire., peuvent être indiqués sur la 2ème page	
A sample of the product was tested and found to be in conformity with Un échantillon de ce produit a été essaye et a été considéré conforme à la	**PUBLICATION** **EDITION** IEC 60601-1 2:1988 Amendment No 1 (1991) and Amendment No 2 (1995), excluding requirements for Electromagnetic Compatibility (Clause 36), Biocompatibility (Clause 48) and Programmable Electronic Systems (Clause 52.1) Including National Differences: *AU, CA, DK, IL, KR, US, per CB Bulletin 107A*
As shown in the Test Report Ref. No. which forms part of this Certificate Comme indique dans le Rapport d'essais numéro de référence qui constitue partie de ce Certificat	CB 150684 - 1278016 *(1748146)*

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

CSA INTERNATIONAL

CSA International
178 Rexdale Boulevard
Toronto, ON M9W 1R3

Date: January 16, 2006

Signature: Timo Venalainen, P.Eng.

File E116994
Project 02SC00019

2002-12-02

REPORT

ON

COMPONENT - POWER SUPPLIES,
MEDICAL AND DENTAL EQUIPMENT

Condor D C Power Supplies Inc.
Oxnard, California

DESCRIPTION

PRODUCT COVERED:

USR, CNR - COMPONENT, Switching Power Supply, Medical and Dental, Model GPFM1200-48.

ELECTRICAL RATINGS:

Input: 100-240 V~, 50/60 Hz, 18.0 A.
Outputs: +48 V/25 A, +12 V/0.3 A.

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

USR – indicates investigation to the Standard for Medical Electrical Equipment, UL 2601-1, Second Edition

CNR – indicates investigation to Canadian Standard CSA C22.2 No. 601.1

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

ENGINEERING REFERENCES:

Following Illustrations are provided for engineering references:

Ill. 1 – Isolation Diagram
Ill. 2 – PWB Trace Layout
Ill. 3 – Transformer Construction Detail (T1, T4)
Ill. 4 – Installation Instructions

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 Second 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 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, T1 complies with Class 180 limits, and the auxiliary isolation transformer, T4, 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; 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. This power supply has been evaluated for patient care equipment, but not patient connected.

13. The internal fuse is located in the phase lead only. UL 2601-1 requires that both supply leads (phase and neutral) be protected against overcurrent except for permanently installed equipment. Complete overcurrent protection must be provided in the end product. Fuse ratings must not exceed that specified for the internal fuse.

CSA INTERNATIONAL

Certificate of Compliance

Certificate: 1278018 **Master Contract:** 150684 (LR 46516C)

Edition: 1 **Date Issued:** January 14, 2002

Issued to: **Condor D.C. Power Supplies**
2311 Statham Parkway
Oxnard, CA 93033
USA

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'

C US

Issued by: Shane Stevenson, AScT.

Approved by: Terry Nagy
Operations Manager

PRODUCTS

CLASS 5311 20 - POWER SUPPLIES - Component Type - For Use in Medical Equipment
CLASS 5311 96 - POWER SUPPLIES - Component Acceptance (Certified to U.S. Standards)

Component Power Supply for use in Medical Equipment, where the suitability of the combination is to be determined by CSA International.

- Model GPFM1200-48, input rated 100-240 V ac, 50/60 Hz, 18.0 A; dc outputs rated overall classification L6M1, +48 V/25 A (L5M1), +12 V/0.3 A (L3M1).

APPLICABLE REQUIREMENTS

CAN/CSA Standard C22.2 No. 601.1-M90 - Medical Electrical Equipment
UL Standard 2601-1, 2nd Edition - Medical Electrical Equipment, Part 1: General Requirements for Safety

The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S., respectively. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognised to perform certification to U.S. Standards.

CSA INTERNATIONAL

Certificate: 1278018 **Master Contract:** 150684 (LR 46516C)
Edition: 1 **Date:** January 14, 2002

Conditions of Acceptability:

1. This component has been judged on the basis of the required spacings in the Standard for Medical Electrical equipment, Part 1: General Requirements for Safety, CAN/CSA-C22.2 No. 601.1-M90, which covers the end-use product for which the component is designed.

2. The enclosure provided with this equipment does not meet the applicable requirements for Fire or Electrical enclosures. Suitable enclosure to be provided in the end-use equipment.

3. The input and output connectors are not acceptable for field connections, they are only intended for connection to mating connectors of internal wiring inside the end-use equipment.

4. The main isolation transformer (T1) is provided with Class H insulation, and transformer (T4) is provided with Class F insulation.

5. The output circuits have not been evaluated for direct patient connection (Type B, BF or CF).

6. The power supply has been evaluated for patient care equipment, but not patient connected.

7. The temperature test was performed in a raised ambient of 50°C.

8. The power supply was evaluated for Reinforced insulation between primary and secondary, and Basic insulation between primary and ground, based on min 250 V ac.

9. The power supply has been evaluated as Class I equipment, 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.

10. Under normal and single fault conditions, the outputs do not exceed 25 V ac or 60 V dc.

11. The internal fuse is located in the phase lead only. CAN/CSA-C22.2 No. 601.1-M90 requires that both supply leads (phase and neutral) be protected against overcurrent except for permanently installed equipment. Complete overcurrent protection must be provided in the end-use equipment. Fuse ratings must not exceed that specified for the internal fuse.

CSA INTERNATIONAL

Supplement to Certificate of Compliance

Certificate: 1278018 **Master Contract:** 150684 (LR 46516C)

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

Product Certification History

Edition	Date	Description
1	January 14, 2002	Original Certification.

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Certificate

TÜV PRODUCT SERVICE

No: B 02 01 14549 226

Condor DC Power Supplies, Inc.

2311 Statham Pkwy.
Oxnard, CA 93033
USA

with production facility(ies)
16784

is authorized to label the following products with the
certification mark E20
as shown in the certification mark list. See also notes overleaf.

Product:	**Schaltnetzteile** **Switching Mode Power Supply**	
Model:	**GPFM1200-48**	
Parameters:	Rated Input Voltage:	100 - 240 V AC
	Rated Frequency:	50 / 60 Hz
	Rated Input Current:	18.0 A
	Rated Output Voltage:	See Attachment
	Rated Output Current:	See Attachment
	Protection Class:	I

This certificate issued under ACT project number SI108108-103.

The product meets the relevant safety requirements and was tested according to (report no.: SI108108-103)

EN 60601-1:1990+A1:1993+A2:1995

Released with the above certificate number by TÜV PRODUCT SERVICE, the Product Certification Body of TÜV AMERICA INC.

Department: SDGMED/BJA Date: January 28, 2002

TÜV
PRODUCT SERVICE

Attachment to Condor, Inc. DC Power Supplies
Certificate B 02 01 14549 226
GPFM1200-48

Rated Output Voltage	Rated Output Current	Rated Auxillary Output Voltage	Rated Auxillary Output Current
+48 V dc	25 A	+12 V dc	0.3 A

Notes:

1. Maximum ambient temperature for rated output current is 50°C.
2. Auxillary +12 V output may be used to power external logic and/or fan.
3. Maximum operating relative humidity 96%, no condensation.
4. Storage: -40°C to +85°C. Units should be allowed to warm-up under non-condensing conditions before application of power.
5. Mode of operation: Continuous
6. Refer to Installation Instructions for additional information or contact factory for additional details.

Certificate and Attachment issued under ACT project SI108108-103.

Department: SDGMED/BJA

Date: 01/28/02

TÜV PRODUCT SERVICE SAN DIEGO