Ref. Certif. No.

US/8848/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

Power Supply

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) W E D Z, 2 Gutang Rd Wujiang City, Suzhou Jiangsu, China
3. Shanghai Ges Information Technology Co. Ltd, Zhangjiang Hi Tech Park 668 Li Shi Zhen Rd. 201203 Shanghai, China

Rating and principal characteristics
Valeurs nominales et caractéristiques principales

Input: 100-240 V~, 1.3 A, 50/60 Hz
Output: 5 Vdc minimum, 28 Vdc maximum.
6.0 A maximum, 1.4 A minimum,
41 W maximum. (GLM41-5 rated to 30 W max.)

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

CONDOR

Model / Type Ref.
Ref. de type

GPM41-X Series, where X is any number from 5 through 28, which represents the output voltage rating.

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

The CB 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-A17-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.®

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 November 1

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 GPM41 followed by suffixes -5, -12, -15, -24 or -28, and Models MSP1579 and MSP1675.

ELECTRICAL RATINGS:

Input: 100-240 V ac, 50/60 Hz, 1.3 A.

Outputs:	GPM41-5	5 V, 6 A
	GPM41-12	12 V, 3.3 A
	GPM41-15	15 V, 2.7 A
	MSP1675	15 V, 2.7 A
	GPM41-24	24 V, 1.7 A
	GPM41-28	28 V, 1.4 A
	MSP1579	16.5 V, 2.4 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 60601-1 . An insulation diagram is provided as ILL. 1 and the manufacturer's installation instructions is provided as ILL. 4. Note: Model MSP1579 may not be provided with 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 First Edition of the Standards for Medical Electrical Equipment, Part 1: General Requirements for Safety, UL 60601-1, 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. The output circuits have not been evaluated for direct patient connection (Type B, BF or CF).

5. The component should be properly bonded to ground in the end-use equipment.

6. The Temperature Test was performed in a raised ambient of 50°C.

7. The main isolation transformer, T2, complies with Class 155 limits.

8. Leakage current testing should be repeated in the end product application.

9. The power supply was evaluated as Reinforced insulation between primary and secondary; basic insulation between primary to ground and secondary to ground.

10. 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 anaesthetic mixture with air, oxygen, or nitrous oxide.

11. Fusing in the end product shall be considered since two external fuses rated 2.5 A, 250 V, were used for all component fault tests. This fusing must be provided in the end-use equipment and, if the fuse value is greater, component fault testing should be considered when evaluating the end product.

CSA INTERNATIONAL

Certificate of Compliance

Certificate: 1125259 (LR 46516C) **Master Contract:** 150684

Project: 1722945 **Date Issued:** 2005/10/21

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, MASc. E.Eng.

Authorized by: Shane Stevenson, Product Group Manager

PRODUCTS

CLASS 5311 07 - POWER SUPPLIES - Component Type - (CSA 60950-1-03)
CLASS 5311 20 - POWER SUPPLIES - Component Type - For Use in Medical Equipment

Component Power supplies for use in other equipment where the acceptability of the combination is to be determined by CSA International.

Model Numbers: GPC41-X, where X represents the output voltage which may be any number from 5 thru 28. Models may or may not be followed by –XXX, where XXX may be any number from 001 thru 999. The –XXX suffix are used for value added configurations that have no impact on safety. Input rated 100-240 V, 50/60 Hz, 1.3 A; output rated 40 W max.

Notes:

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CSA INTERNATIONAL

Certificate:	1125259 (LR 46516C)	**Master Contract:**	150684
Project:	1722945	**Date Issued:**	2005/10/21

1. Maximum ambient temperature for rated output is 50 ºC.

2. Maximum Operating Relative Humidity 96 %, no condensation.

3. Storage: -40 to +85 ºC. Units should be allowed to warm-up under non-condensing conditions before application of power.

Component power supplies for use in medical equipment where the suitability of the combination is to be determined by CSA International.

Model Numbers: GPM41-X, where X represents the output voltage which may be any number from 5 thru 28. Models may or may not be followed by –XXX, where XXX may be any number from 001 thru 999. The –XXX suffix are used for value added configurations that have no impact on safety. Input rated 100-240 V, 50/60 Hz, 1.3 A; output rated 40 W max.

Model MSP1579, input rated 100-240V, 50/60 Hz, 1.3 A; dc output rated 16.5 V/2.4 A.

Model MSP1675, input rated 100-240V, 50/60 Hz, 1.3 A; dc output rated 15 V/2.7 A.

Notes:

1. Maximum ambient temperature for rated output is 50 ºC.

2. Maximum Operating Relative Humidity 96 %, no condensation.

3. Storage: -40 to +85 ºC. Units should be allowed to warm-up under non-condensing conditions before application of power.

4. All outputs are intended for Signal Output and Intermediate Circuits only. The output is not acceptable for patient connection without additional isolation.

5. The outputs are SELV during normal and single fault conditions.

6. The isolation voltage from primary to secondary is 4000 V ac. The creepage distance between primary and secondary circuits is 8 mm minimum.

7. External overcurrent protection is required.

APPLICABLE REQUIREMENTS

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

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

Certificate

No: B 99 04 14549 149

TÜV PRODUCT SERVICE

Condor DC Power Supplies Inc.

2311 Statham Parkway
Oxnard, CA 93033
USA

with production facilities
16784

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

Product: **Schaltnetzteile**
Switching Mode Power Supply

Model: **GPM41-5, GPM41-12, GPM41-15, GPM41-24, GPM41-28**
MSP 1675

Parameters:

Rated Input Voltage:	100 - 240 VAC
Rated Frequency:	50 / 60 HZ
Rated Input Current:	1.3 A
Rated Output Voltage:	See Attachment
Rated Output Current:	See Attachment
Protection Class:	I

The product meets the relevant safety requirements and was tested according to (report no.: SM1I927901):

EN60601-1:1990+A1:1993+A2:1995

Released with the above certificate number by the certification body of TÜV PRODUCT SERVICE GMBH.

R - (B 96 09 14549 100)

Department: SDGMED / GV

Date: 04-27-99

TÜV
PRODUCT SERVICE

Attachment to Condor Certificate B 99 03 14549 149

Rated Outputs for Model *GPM41-5, GPM41-12, GPM41-15, GPM41-24, GPM41-28 & MSP 1675*

Model	Output at 50°C
GPM41-5	+5.0 VDC 6.0A
GPM41-12	+12.0 VDC 3.3A
GPM41-15	+15.0 VDC 2.7A
GPM41-24	+24.0 VDC 1.7A
GPM41-28	+28.0 VDC 1.4A
MSP 1675	+15.0 VDC 2.7A

This power supply has not been evaluated for applied part outputs or accessible parts circuits.

The end application shall have the line and neutral fused.

The point of the power supply that is designated as earth - ground shall be connected to the protective earth in the end-use product.

Maximum ambient temperature for rated output is 50°C.

Maximum Relative Humidity 96%, no condensation.

C. Ritter

Project no. SM1I-9279-01