



Test Report issued under the responsibility of:



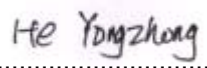
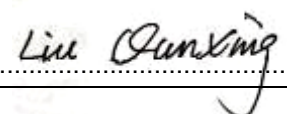
**TEST REPORT**

**IEC 60950-1: 2005 (2nd Edition) and/or EN 60950-1:2006  
Information technology equipment – Safety –**

**Part 1: General requirements**

<b>Report Reference No.</b> .....	CEPREI1207CB00291
Date of issue .....	July 10, 2012
Total number of pages .....	62 pages
<b>CB/CCA Testing Laboratory</b> .....	<b>China CEPREI Laboratory</b>
Address .....	No. 110 Dongguan Zhuang Road, Tianhe District, 510610 Guangzhou, China
<b>Applicant's name</b> .....	Delta Electronics, Inc.
Address .....	3, Tung Yuan Road, Chungli Industrial Zone, Taoyuan Shien 320, Taiwan 320
<b>Manufacturer's name</b> .....	Delta Electronics, Inc.
Address .....	3 Tungyuan Road, Chungli Industrial Zone, Taoyuan County 32063, Taiwan
<b>Factory's name</b> .....	Delta Electronics Power (Dongguan) Co., Ltd.
Address .....	Delta Industrial Estate, Shijie Town, Dongguan City, Guangdong Province 523308, P.R.China
<b>Test specification:</b>	
Standard .....	<input checked="" type="checkbox"/> IEC 60950-1:2005 (2nd Edition) and/or <input checked="" type="checkbox"/> EN 60950-1:2006
Test procedure .....	CB / CCA
Non-standard test method.....	N/A
<b>Test Report Form No.</b> .....	IECEN60950_1C
Test Report Form(s) Originator .....	SGS Fimko Ltd
Master TRF .....	Dated 2007-06
<b>Copyright © 2007 IEC System for Conformity Testing and Certification of Electrical Equipment (IECEE), Geneva, Switzerland. All rights reserved.</b>	
This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.	
If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.	
<b>This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.</b>	
<b>Test item description</b> .....	AC/DC MEDICAL ADAPTER
Trade Mark .....	None
Manufacturer .....	Same as applicant
Model/Type reference .....	1) MDS-060AAS12 B, 2)MDS-060AAS24 B

Ratings .....: 1)AC 100-250V, 50-60Hz, 1.5-0.75A; Output: DC 12V/5A  
2):AC 100-250V, 50-60Hz, 1.5-0.75A; Output: DC 24V/2.5A

Testing procedure and testing location:	
<input checked="" type="checkbox"/> <b>CB/CCA Testing Laboratory:</b> Testing location/ address ..... : <input type="checkbox"/> <b>Associated CB Laboratory:</b> Testing location/ address ..... : Tested by (name + signature)..... : Approved by (+ signature)..... :	<b>China CEPREI Laboratory</b> No. 110 Dongguanhuang Road, Tianhe District, 510610 Guangzhou, China N/A N/A He Yongzhong Liu Qunxing  
<input type="checkbox"/> Testing procedure: TMP Tested by (name + signature)..... : Approved by (+ signature)..... : Testing location/ address ..... :	N/A N/A N/A
<input type="checkbox"/> Testing procedure: WMT Tested by (name + signature)..... : Witnessed by (+ signature) ..... : Approved by (+ signature)..... : Testing location/ address ..... :	N/A N/A N/A N/A
<input type="checkbox"/> Testing procedure: SMT Tested by (name + signature)..... : Approved by (+ signature)..... : Supervised by (+ signature)..... : Testing location/ address ..... :	N/A N/A N/A N/A
<input type="checkbox"/> Testing procedure: RMT Tested by (name + signature)..... : Approved by (+ signature)..... : Supervised by (+ signature)..... : Testing location/ address ..... :	N/A N/A N/A N/A

**Summary of testing:****Tests performed (name of test and test clause):**

1.6.2	Input Current Test
1.7.11	Durability of Marking Test
2.1.1.1	Access to Energized Parts Test
2.1.1.5	Energy Hazards Test
2.2.2	SELV Limits under Normal Conditions
2.2.3	SELV Limits under Fault Conditions
2.6.3.4	Resistance of Earthing Conductors Measurement
2.9.2	Humidity Conditioning Test
2.10	Clearances and Creepage Distances Measurement
4.1	Angle of 10 Test
4.2.2	Steady Force Test, 10 N
4.2.3	Steady Force Test, 30 N
4.2.4	Steady Force Test, 250 N
4.2.5	Impact Test
4.2.7	Stress Relief Test
4.5.2	Temperature Test
4.5.5	Ball Pressure Test
5.1	Touch Current Measurement
5.2	Electric Strength Test
5.3	Abnormal Operating and Fault Conditions Test
ANNEX C	Transformers

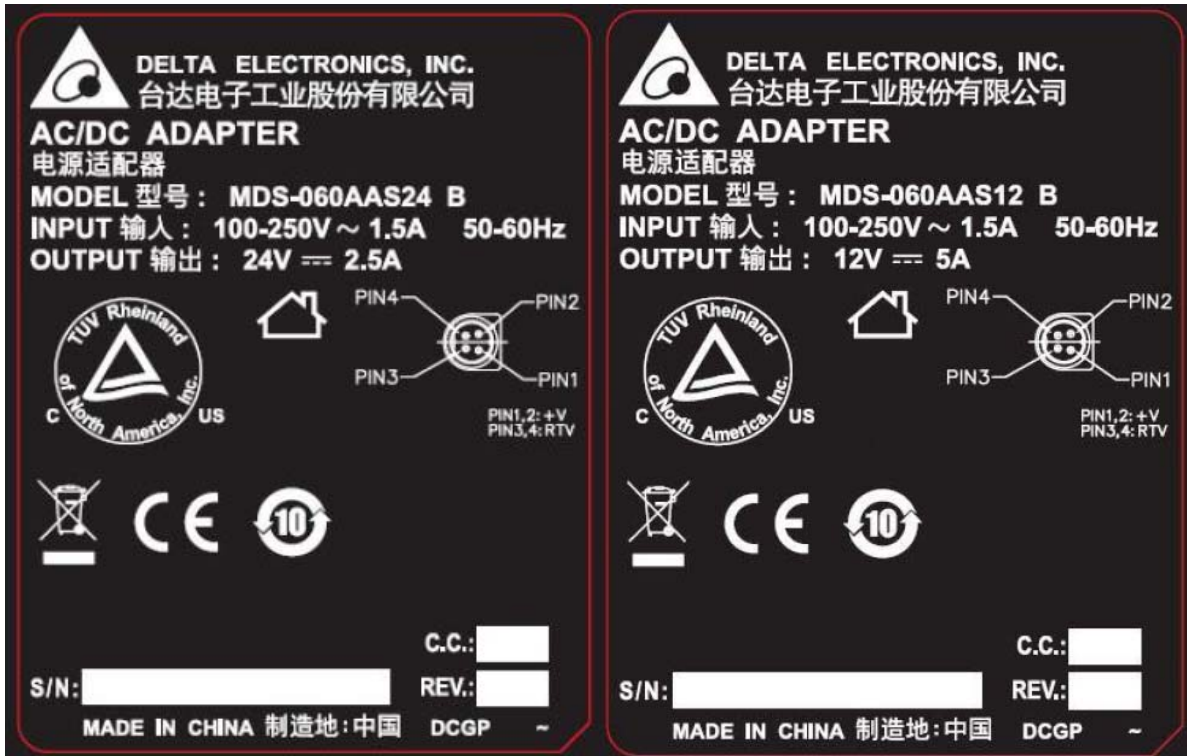
**Testing location:**

China CEPREI Laboratory  
 No. 110 Dongguanzhuang Road, Tianhe District,  
 510610 Guangzhou, China

**Summary of compliance with National Differences:****Group Differences**

- IEC 60950-1, 2nd edition (2005):

Copy of marking plate



<b>Test item particulars</b> .....	
Equipment mobility .....	<input checked="" type="checkbox"/> movable <input type="checkbox"/> hand-held <input checked="" type="checkbox"/> transportable <input type="checkbox"/> stationary <input type="checkbox"/> for building-in <input type="checkbox"/> direct plug-in
Connection to the mains .....	<input checked="" type="checkbox"/> pluggable equipment <input checked="" type="checkbox"/> type A <input type="checkbox"/> type B <input type="checkbox"/> permanent connection <input checked="" type="checkbox"/> detachable power supply cord <input type="checkbox"/> non-detachable power supply cord <input type="checkbox"/> not directly connected to the mains
Operating condition .....	<input checked="" type="checkbox"/> continuous <input type="checkbox"/> rated operating / resting time:
Access location .....	<input checked="" type="checkbox"/> operator accessible <input type="checkbox"/> restricted access location
Over voltage category (OVC) .....	<input type="checkbox"/> OVC I <input checked="" type="checkbox"/> OVC II <input type="checkbox"/> OVC III <input type="checkbox"/> OVC IV <input type="checkbox"/> other:
Mains supply tolerance (%) or absolute mains supply values .....	+10% / -10%
Tested for IT power systems .....	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
IT testing, phase-phase voltage (V) .....	N/A
Class of equipment .....	<input checked="" type="checkbox"/> Class I <input type="checkbox"/> Class II <input type="checkbox"/> Class III <input type="checkbox"/> Not classified
Considered current rating (A) .....	16A
Pollution degree (PD) .....	<input type="checkbox"/> PD 1 <input checked="" type="checkbox"/> PD 2 <input type="checkbox"/> PD 3
IP protection class .....	IPX0
Altitude during operation (m) .....	5000m
Altitude of test laboratory (m) .....	2000m
Mass of equipment (kg) .....	0.36 kg
<b>Possible test case verdicts:</b>	
- test case does not apply to the test object .....	N/A
- test object does meet the requirement .....	P (Pass)
- test object does not meet the requirement .....	F (Fail)
<b>Testing</b> .....	
Date of receipt of test item .....	2012.06.25
Date(s) of performance of tests .....	2012.06.25 –2012.07.09
<b>General remarks:</b>	
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.	
<b>Note: This TRF includes EN Group Differences together with National Differences and Special National Conditions, if any. All Differences are located in the Appendix to the main body of this TRF.</b>	
Throughout this report a point is used as the decimal separator.	

**General product information:**

The equipment models MDS-060AAS12 B and MDS-060AAS24 B are AC Adapter for used with information technology equipment.

All models are similar except for model designation, output rating.

The correction factors of clearance is 1.48, specified in table A. 2 of IEC 60664-1:1992+A1: 2000+A2: 2000 for altitude 5000m.

The product was submitted and tested for use at the maximum ambient temperature (T<sub>ma</sub>) permitted by the manufacturer' s specification of: 40° C.

The test samples are pre-production without serial number.

**Factory(ies):**

Delta Electronics Power (Dongguan) Co., Ltd.

Delta Industrial Estate, Shijie Town, Dongguan City, Guangdong Province 523308, P.R.China

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

AC ADAPTER

Name and address of the applicant  
Nom et adresse du demandeur

Delta Electronics, Inc. 3 Tungyuan Road,  
Chungli Industrial Zone,  
32063 Taoyuan County, Taiwan

Name and address of the manufacturer  
Nom et adresse du fabricant

Delta Electronics, Inc. 3 Tungyuan Road,  
Chungli Industrial Zone,  
32063 Taoyuan County, Taiwan

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

Additional Information page 2

Note: When more than one factory, please report on page 2  
Note: Lorsque il y plus d'une usine, veuillez utiliser la 2<sup>ème</sup> page

Ratings and principal characteristics  
Valeurs nominales et caractéristiques principales

AC 100-250V; 50-60Hz; 1.5-0.75A; Class I;  
output: DC 12V; 5A (for model MDS-060AAS12 B);  
DC 24V; 2.5A (for model MDS-060AAS24 B)

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

Delta or Trademark of Delta

Model/type Ref.  
Ref. de type

MDS-060AAS12 B; MDS-060AAS24 B

Additional information (if necessary may also be  
reported on page 2)  
Les Information complémentaire (si nécessaire,  
peuvent être indiqués sur la 2<sup>ème</sup> page)

Models differ in model name, output rating, and the rating  
of some components; for details see test report.

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 60601-1:2005  
National differences see test report

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 une partie de ce Certificat

11028682 001

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: 15.06.2012

TÜV Rheinland LGA Products GmbH  
Tillystraße 2 · 90431 Nürnberg, Germany  
Phone + 49 221 806-1371  
Fax + 49 221 806-3935  
Mail: cert-validity@de.tuv.com  
Web: www.tuv.com

Signature:

Dipl.-Ing. W. Hsu





- |   |  |
|---|--|
| 1. Delta Electronics (Thailand) Public Co., Ltd. 909 Soi 9, Moo 4, Bangpoo Ind., Estate (E.P.Z.), Pattana 1 Rd. Tambol Phraksa Amphur Muang, Samutprakarn 10280, Thailand | 2. Delta Electronics (Jiang Su), Ltd. No. 1688, Jiangxing East Road Wujiang Economic Development Zone Wujiang City, 215200 Jiang Su, China |
| 3. Delta Electronics (Dongguan) Co., Ltd. Delta Industrial Estate Shijie Town Dongguan City, Guangdong, China   | .  |

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

Date: 15.06.2012

Signature:

Dipl.-Ing. W. Hsu

