

## UL TEST REPORT AND PROCEDURE

<b>Standard:</b>	UL 60950-1, 2nd Edition, 2014-10-14 (Information Technology Equipment - Safety - Part 1: General Requirements) CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information Technology Equipment - Safety - Part 1: General Requirements)
<b>Certification Type:</b>	Listing
<b>CCN:</b>	QQGQ, QQGQ7 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment)
<b>Product:</b>	AC Adapter for Direct Plug-in
<b>Model:</b>	DA10-050US, DA10-050CH (for CB only), DA10-050EU (for CB only), DA10-050UK (for CB only)
<b>Rating:</b>	Input: 100-240 Vac, 50/60Hz, 0.3 A Output: 5V, 2A
<b>Applicant Name and Address:</b>	ASTEC INTERNATIONAL LTD 16TH FL LU PLAZA 2 WING YIP ST, KWUN TONG KOWLOON HONG KONG

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared by: Brian Wong

Reviewed by: Steve Chiu

**Supporting Documentation**

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

- A. Authorization - The Authorization page may include additional Factory Identification Code markings.
- B. Generic Inspection Instructions -
  - i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
  - ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
  - iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

**Product Description**

The product is an AC Power Adapter for direct plug-in, Class II product, used for Information Technology Products, switch mode construction with plastic enclosure. This adapter is not intended for repairing. Maximum operating ambient (Tma):40°C. Model DA10-050US is provided with US input blade, model DA10-050CH is provided with China input blade, model DA10-050EU is provided with EU input blade and model DA10-050UK is provided with UK input blade.

**Model Differences**

The construction of model DA10-050CH is identical to DA10-050US except for provided with China input blade.  
The construction of model DA10-050EU is identical to DA10-050US except for provided with Europe input blade.  
The construction of model DA10-050UK is identical to DA10-050US except for provided with British input blade.  
Model DA10-050US is provided with US input blade and model DA10-050CH is provided with China input blade. Model DA10-050EU is provided with Europe input blade.  
Model DA10-050UK is provided with British input blade.

**Technical Considerations**

- Equipment mobility : direct plug-in
- Connection to the mains : pluggable A
- Operating condition : continuous
- Access location : operator accessible
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values : +10%, -10%
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : --
- Class of equipment : Class II (double insulated)
- Considered current rating of protective device as part of the building installation (A) : 20A
- Pollution degree (PD) : PD 2
- IP protection class : IP 20
- Altitude of operation (m) : 2000

- Altitude of test laboratory (m) : <500
- Mass of equipment (kg) : 0.03
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 40°C
- The means of connection to the mains supply is: Pluggable A
- The product is intended for use on the following power systems: TN
- The equipment disconnect device is considered to be: Plug
- The product was investigated to the following additional standards: EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 (which includes all European national differences, including those specified in this test report).
- The following accessible locations (with circuit/schematic designation) are within a limited current circuit: Y1-Cap (C11)
- The following circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS): Output
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual
- The power supply in this equipment was: Investigated to IEC 60950-1. As part of the investigation of this product, the power supply and its test report were reviewed and found to comply with IEC 60950-1.

#### Additional Information

- Plug test for US version (Model DA10-050US) under UL1310 is considered.
- This equipment is intended to operate in a normal environment (Office and home) and at elevations up to 2000 meters only.
- Plug test for EU version (Model DA10-050EU) under EN50075 is considered under TUV report no. 68.210.15.157.01.
- Plug test for UK version (Model DA10-050UK) under BS1363 is considered under ITL report no. 15091755.

This report is a reissue of CBTR Ref. No. E132002-A379-CB-1 Amendment 1, CB Test Certificate Ref. No. DK-44356-A1-UL. Based on previously conducted testing and the review of product construction, only steady force, drop and stress relief tests were deemed necessary

E132002-A402-CB-1, Project 4787091059

- This test report shall be read in conjunction with original test Report No.:

1. E132002-A379-CB-1, issued date 2015-03-26, Certificate (DK-44356-UL) with date 2015-03-26
2. E132002-A379-CB-1, issued date 2015-06-11, Certificate (DK-44356-A1-M1-UL) with date 2015-06-16

E132002-A402-CB-1, Project 4787091059

1. Adding a new model DA10-050UK.

E132002-A379-CB-1-Amendment 1, Project 4786955044

1. Adding a new model DA10-050EU.
2. Adding alternate source of resistor (R1) and Y-Cap (C11)
3. Change CCN of Astec's Transformer (for UL report only)

#### Additional Standards

The product fulfills the requirements of: EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013

#### Markings and instructions

Clause Title	Marking or Instruction Details
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