

UL TEST REPORT AND PROCEDURE

Standard:	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)
Certification Type:	Listing
CCN:	QQGQ, QQGQ7 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment)
Product:	AC to DC Adaptor
Model:	DP4012N3M, DP4012N2M DP4009N3M, DP4009N2M DP4015N3M, DP4015N2M DP4018N3M, DP4018N2M DP4024N3M, DP4024N2M DP4048N3M, DP4048N2M
Rating:	For Models DP4012N3M, DP4012N2M: Input:100-240 Vac, 50/60 Hz, 1.0A, 49W Max. Output:12 V, 3.33A Max For Models DP4009N3M, DP4009N2M: Input:100-240 Vac, 50/60 Hz, 1.0 A, 49W Max. Output:9 V, 4.44A Max For Models DP4015N3M, DP4015N2M: Input:100-240 Vac, 50/60 Hz, 1.0 A, 49W Max. Output:15 V, 2.67A Max For Models DP4018N3M, DP4018N2M: Input:100-240 Vac, 50/60 Hz, 1.0 A, 49W Max. Output:18 V, 2.22 A Max For Models DP4024N3M, DP4024N2M: Input:100-240 Vac, 50/60 Hz, 1.0 A, 49W Max. Output:24 V, 1.67A Max For Models DP4048N3M, DP4048N2M: Input:100-240 Vac, 50/60 Hz, 1.0 A, 49W Max. Output:48 V, 0.84A Max
Applicant Name and Address:	ASTEC INTERNATIONAL LTD 16TH FL, LU PLAZA, KWUN TONG, 2 WING YIP ST, KOWLOON HONG KONG

Issue Date: 2009-04-28
2015-11-12

Page 2 of 14

Report Reference #

E132002-A94-UL

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: Henry Ho

Reviewed by: Paul Wan

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

AC Power Adapter intended for Information Technology Products, switch mode construction with plastic enclosure.

Model Differences

Models DP4048N3M, DP4024N3M, DP4018N3M, DP4012N3M, DP4009N3M and DP4015N3M are identical to each other except output ratings, transformer T1, and ratings of some non-critical components. The Model DP40XXN2M is identical to Model DP40XXN3M except for the class of production. The Model DP40XXN2M are class II production, Model DP40XXN3M are class I production. (XX can be 09, 12, 15, 18, 24, 48)

Technical Considerations

- Equipment mobility : transportable
- 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 : Yes
- IT testing, phase-phase voltage (V) : N/A
- Class of equipment : Class I (earthed) for models DP4012N3M, DP4009N3M, DP4015N3M, DP4018N3M, DP4024N3M, DP4048N3M; Class II (double insulated) for model DP4012N2M, DP4009N2M, DP4015N2M, DP4018N2M, DP4024N2M and DP4048N2M
- Considered current rating of protective device as part of the building installation (A) : See Cover Page for details
- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m) : 2000
- Altitude of test laboratory (m) : <500
- Mass of equipment (kg) : <0.5 Kg
- 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 product was submitted and evaluated for use at the maximum ambient temperature (T_{ma}) permitted by the manufacturer's specification of: 40 °C at full load, 60 °C at half load.
- The means of connection to the mains supply is: Pluggable A
- The product is intended for use on the following power systems: IT TN
- The equipment disconnect device is considered to be: Appliance inlet
- 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 are available from the Applicant upon request: Installation (Safety) Instructions / Manual
- The following accessible locations (with circuit/schematic designation) are within a limited current circuit: Secondary Output