UL TEST REPORT AND PROCEDURE

Standard:	UL 62368-1, 2nd Ed, 2014-12-01 (Audio/video, information and communication technology equipment Part 1: Safety requirements) CAN/CSA C22.2 No. 62368-1-14, 2nd Ed (Audio/video, information and communication technology equipment Part 1: Safety requirements)
Certification Type:	Listing
CCN:	QQJQ, QQJQ7 (Power Supplies for Use in Audio/Video, Information and Communication Technology Equipment)
Product:	Switching Brick Power Supply
Model:	ALM120PSXXYY-ZZ##V (where XX is any number between 12-24 designating output voltage and YY can be blank or "C2" designating Class II configuration, and -ZZ can be blank or "-A", "-6", "-6A", "-8", "-8A" designating AC inlet type, and V can be any alphanumeric or blank designating casing colour) Models may have an additional ## identifier which can be any alphanumeric or blank designating marketing purposes only.
Rating:	Input: 100-240 Vac, 50/60 Hz, 1.4 A Output: ALM120PS12: 12 Vdc (10.1 - 13.5 Vdc), 10 A max., 120W max.; ALM120PS15: 15 Vdc (13.5 - 17.0 Vdc), 8 A max., 120W max.; ALM120PS19: 19 Vdc (17.1 - 21.0 Vdc), 6.32 A max., 120W max.; ALM120PS24: 24 Vdc (21.0 - 26.0 Vdc), 5 A max., 120W max..
Applicant Name and Address:	XP POWER L L C 15641 RED HILL AVE, SUITE 100 TUSTIN CA 92780

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.

UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

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

Prepared By: Chai Ming Yuo / Project Handler Reviewed By: Chiang Shiau Hui / Reviewer

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

Switching mode AC-DC power adapter intended for use with audio/video, information and communication technology equipment. The top and bottom enclosure are fixed together by ultrasonic welding.

Model Differences

All models within the series are identical with exception to power transformer (T1) winding and other minor changes to secondary circuit to accommodate different output voltages and current ratings.

Models may have an additional YY identifier which can be blank or "C2" to designate a Class II configuration.

Models may have an additional ZZ identifier which can be blank or "A", "6", "6A", "8", "8A" to designate the type of input connector:

- blank designates a C14 input connector (Class I construction) or C18 input connector (Class II construction);
- "A" designates a C14 input connector with optional IEC cable retention;
- "6" designates a C6 input connector;
- "6A" designates a C6 input connector with optional IEC cable retention;
- "8" designates a C8 input connector;
- "8A" designates a C8 input connector with optional IEC cable retention.

Models may have an additional ## identifier which can be any alphanumeric or blank designating marketing purposes only.

Models may have an additional V identifier which can be any alphanumeric or blank to represent the colour of the casing.

Output voltage rating indicated in '( )' under "Ratings" represents voltage tolerance evaluated.

ALM120PS12: 12 Vdc (10.1 - 13.5 Vdc), 10 A max., 120W max.;

ALM120PS15: 15 Vdc (13.5 - 17.0 Vdc), 8 A max., 120W max.;

ALM120PS19: 19 Vdc (17.1 - 21.0 Vdc), 6.32 A max., 120W max.;

ALM120PS24: 24 Vdc (21.0 - 26.0 Vdc), 5 A max., 120W max.;

Test Item Particulars	
Classification of use by:	Ordinary Person Children likely to be present
Supply Connection:	AC Mains
Supply % Tolerance:	+10%/-10%
Supply Connection – Type:	pluggable equipment type A - appliance coupler
Considered current rating of protective device as part of building or equipment installation:	20 A; Installation location: building
Equipment mobility:	transportable
Over voltage category (OVC):	OVC II
Class of equipment:	Class I Class II with functional earthing
Access Location:	N/A
Pollution degree (PD):	PD 2

Manufacturer's specified maximum operating ambient:	40 °C for 100% load; 60 °C for 60% load.
IP protection class:	IPX0
Power Systems:	TN
Altitude during operation (m):	5000 m
Altitude of test laboratory (m):	2000 m or less
Mass of equipment (kg):	0.506 kg

Technical Considerations

- The following were investigated as part of the protective earthing/bonding : Appliance inlet to output ground
- The following are available from the Applicant upon request : Installation (Safety) Instructions / Manual
- 12 The equipment employs Functional Earthing. The following insulation is provided between the primary and accessible dead metal parts and circuits: Double/Reinforced (configurations with a ground pin in the appliance inlet)

Additional Information

N/A

Additional Standards

The product fulfills the requirements of: N/A

Markings and Instructions

Clause Title	Marking or Instruction Details
F.3.2.1 Equipment identification marking – Manufacturer identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number
F.3.2.2 Equipment identification marking – model identification	Model Number
F.3.3 Equipment rating marking – ratings	"Input Ratings (voltage, frequency/dc, current/power)", "Output Ratings (voltage, frequency/dc, current/power)"
F.3.5.3 Fuses – replaceable by skilled person	(component ID: F1 and F2), Ratings (3.15 A), "Ratings (3.15 A, 250 Vac)", and (symbol of required characteristics) located on or adjacent to fuse or fuseholder or in service manual.
F.3.6.2.1 Class II Equipment without Functional Earth	Symbol for Class II construction  (IEC 60417-5172)
DVK, F.3.5.3 Warning to service personnel	"CAUTION: Double pole, neutral fusing. Disconnect mains before servicing. "/"ATTENTION. Double pôle/fusible sur le neutre. Débrancher l'alimentation avant l'entretien."