CERTIFICATE OF COMPLIANCE

Certificate Number	20181207-E139109
Report Reference	E139109-A6059-UL
Issue Date	2018-DECEMBER-07
Issued to:	XP POWER L L C 15641 RED HILL AVE, SUITE 100, TUSTIN CA 92780
This certificate confirms that representative samples of	POWER SUPPLIES FOR USE WITH AUDIO/VIDEO, INFORMATION AND COMMUNICATION TECHNOLOGY EQUIPMENT Switching Brick Power Supply ALM85US15-XA1185 ALM85USXXYY-WZ##V,Where XX is any number between 12-24, YY can be blank or C2, W can be blank, 6, or 8, Z can be blank or A, # can be blank or any alphanumeric character, and V can be blank or any alphanumeric character, may be provided with or without "-". Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	UL 62368-1 and CAN/CSA C22.2 No. 62368-1-14 - Audio/video, information and communication technology equipment Part 1: Safety requirements
Additional Information:	See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

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)
Complementary CCN:	N/A
Product:	Switching Brick Power Supply
Model:	ALM85US15-XA1185 ALM85USXXYY-WZ##V Where XX is any number between 12-24, YY can be blank or C2, W can be blank, 6, or 8, Z can be blank or A, # can be blank or any alphanumeric character, and V can be blank or any alphanumeric character, may be provided with or without "-".
Rating:	INPUT: 100 - 240 V ~ 1.7A, 50/60Hz OUTPUT: Output voltage rating indicated in '( )' under "Ratings" represents voltage tolerance evaluated. ALM85US12: 12 Vdc (10.1 - 13.5 Vdc), 6.67 A max., 80W max.; ALM85US15: 15 Vdc (13.5 - 17.0 Vdc), 5.33 A max., 80W max.; ALM85US19: 19 Vdc (17.1 - 21.0 Vdc), 4.47 A max., 85W max.; ALM85US24: 24 Vdc (21.0 - 26.0 Vdc), 3.54 A max., 85W max.; ALM85US15-XA1185: 15 Vdc (13.5 - 17.0 Vdc), 5.33 A max., 80W max.;
Applicant Name and Address:	XP POWER L L C 15641 RED HILL AVE, SUITE 100 TUSTIN CA 92780 UNITED STATES

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: Adam Tangocci / Project Handler Reviewed By: Gregory Ray / 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

The devices are a series of isolating Class I or Class II brick type power supplies intended for use with audio/video, information and communication technology equipment. Each model is comprised of electronic components mounted on a PWB and housed within a minimum V-0 thermoplastic enclosure.

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.

For the YY identifier, blank indicates a Class I configuration and C2 indicates a Class II configuration.

For the W identifier, blank indicates a C14 input connector, 6 indicates C6 input connector, and 8 indicates a C8 input connector.

For the Z identifier, blank indicates no IEC cable retention, A indicates IEC cable retention.

For the # identifier, blank or any alphanumeric characters can be used for marketing purposes.

For the V identifier, blank or any alphanumeric character can be used to indicate the color of the casing.

Model ALM85US15-XA1185 is similar to Model ALM85US15 except that ALM85US15-XA1185 do not have Y-Capacitor, C8.

40°C at 100% load; 60°C at 60% load.

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; building;
Equipment mobility	movable
Over voltage category (OVC)	OVC II OVC II

Class of equipment	Class I Class II
Access location	N/A
Pollution degree (PD)	PD 2
Manufacturer's specified maximum operating ambient	See Model Differences section. °C
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)	0.45

Technical Considerations

- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of : 40°C at 100% load; 60°C at 60% load.
- The product is intended for use on the following power systems : TN
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- Considered current rating of protective device as part of the building installation (A) : 20
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- Mains supply tolerance (%) or absolute mains supply values : +10%/-10%
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- The equipment disconnect device is considered to be : Appliance inlet
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- 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
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- 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)
- IEC 62368-1. Additionally evaluated to EN 62368-1:2014+A11:2017; National Differences specified in the CB Test Report.
- The required clearance values have been assessed for suitability up to 5000 m elevation (1.48 correction factor as per IEC 60664-1, Table A2).

Additional Information

Marking Plate is representative of all models.

This report is based on a previous evaluation to IEC 60950-1:2005 (2nd Ed.), Am1:2009 + Am2:2013 under CBTR Ref. No. E139109-A169-CB-2 including Amendments, CBTC Ref. No. DK-68939-UL.

The following tests were conducted as part of the previous evaluation:
Input: Single-Phase (1.6.2)
SELV Reliability Test Including Hazardous Voltage Measurements (2.2.2, 2.2.3, 2.2.4, Part 22 6.1)
Humidity (2.9.1, 2.9.2, 5.2.2)
Determination of Working Voltage; Working Voltage Measurement (2.10.2)
Heating (4.5.1, 1.4.12, 1.4.13)
Component Failure (5.3.1, 5.3.4, 5.3.7)
Abnormal Operation (5.3.1 - 5.3.9)
Power Supply Output Short-Circuit/Overload (5.3.7)

Based on the previously conducted performance testing, only the tests conducted as part of this investigation were considered necessary. The following tests were conducted on a sample of model ALM85US15 in accordance with IEC 62368-1:2014 (Second Edition):
Electric Strength Test (5.4.9)
Safeguards Against Capacitor Discharge After Disconnection of a Capacitor (5.5.2.2)
Prospective Touch Voltage and Touch Current Measurement (5.7)

Additional Standards

The product fulfills the requirements of: EN 62368-1:2014 + A11:2017

Markings and Instructions

Clause Title	Marking or Instruction Details
Warning to service personnel	"CAUTION: Double pole, neutral fusing. Disconnect mains before servicing. "/"ATTENTION. Double pôle/fusible sur le neutre. Débrancher lalimentation avant lentretien."
Equipment identification marking – Manufacturer identification	Listees or Recognized companys name, Trade Name, Trademark or File Number
Equipment identification marking – model identification	Model Number
Equipment rating marking – ratings	"Input Ratings (voltage, frequency/dc, current/power)", "Output Ratings (voltage, frequency/dc, current/power)"
Fuses – replaceable by skilled person	Fuses, F1 and F2, provided with an unambiguous cross reference to service documentation.
Class II Equipment without Functional Earth	Symbol for Class II construction  (IEC 60417-5172)