Certificate of Compliance

Certificate Number:

UL-US-2571897-0

Report Reference:

E139109-20250609

Issue Date:

2025-06-10

Issued to:

XP POWER L L C
340 Commerce, Suite 100 Irvine, CA 92602
United States

This certificate confirms that representative samples of:

QQJQ2 - Power Supplies for Use with Audio/Video, Information and Communication Technology Equipment - Component

See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

UL 62368-1, 3rd Ed., Issue Date: 2019-12-13, Revision Date: 2021-10-22

Additional Information:
See UL Product iQ® at https://iq.ulprospector.com for additional information.

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

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

Look for the UL Recognized Component Mark on the product.

David Piecuch
UL Mark Certification Program Owner

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact UL Solutions Customer Service at https://www.ul.com/contact-us.

CERTIFICATE OF COMPLIANCE

Certificate number	UL-US-2571897-0
Report reference	E139109-20250609
Date	2025-06-10

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Power Supplies for AV, ITE, and AVICT Equipment

Model(s): FLX1K3NAPzzzz-ab *(where z indicates output module type, can be a letter A, B, C, D, F, G, H, J, or O, a indicates between internal modules Parallel configurations, can be a letter A to F, N, P, Q, Z, b indicates between internal modules Series configurations, can be a letter A to F, N, P, Q, Z)*

Certificate of Compliance

Certificate Number:
UL-CA-2552868-0

Report Reference:
E139109-20250609

Issue Date:
2025-06-10

Issued to:

XP POWER L L C
340 Commerce, Suite 100 Irvine, CA 92602
United States

This certificate confirms that representative samples of:

QQJQ8 - Power Supplies for Use with Audio/Video, Information and Communication Technology Equipment Certified for Canada - Component

See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

CSA C22.2 No. 62368-1:19, 3rd Ed., Issue Date: 2019-12-13, Revision Date: 2021-10-22

Additional Information:
See UL Product iQ® at https://iq.ulprospector.com for additional information.

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

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CERTIFICATE OF COMPLIANCE

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Power Supplies for AV, ITE, and AVICT Equipment

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UL TEST REPORT AND PROCEDURE

Standard:	UL 62368-1, 3rd Ed, 2021-10-22 (Audio/video, information and communication technology equipment Part 1: Safety requirements) CAN/CSA C22.2 No. 62368-1:19, 3rd Ed, 2021-10-22 (Audio/video, information and communication technology equipment Part 1: Safety requirements)
Certification Type:	Component Recognition
CCN:	QQJQ2, QQJQ8 (Power Supplies for Use in Audio/Video, Information and Communication Technology Equipment)
Complementary CCN:	N/A
Product:	Switching Power Supply
Model:	FLX1K3NAPzzzz-ab (where z indicates output module type, can be a letter A, B, C, D,F, G, H, J, or O; a indicates between internal modules Parallel configurations, can be a letter A to F, N, P, Q, Z; b indicates between internal modules Series configurations, can be a letter A to F, N, P, Q, Z)
Rating:	Input: 100-240Vac, 10.5A, 50/60Hz Output: See Model differences
Applicant Name and Address:	XP POWER L L C 340 COMMERCE, SUITE 100 IRVINE CA 92602 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: Longjie Zhang / Project Handler Reviewed By: Lorenzo Iorio / 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 models covered in this Report are modular ac to dc power supplies for building-in. The power supply consists of an input power platform and various plug-in output Modules, up to four. Each plug-in output module is one slot width. Each power platform supports four slots per platform.

Outputs can be connected in series or in parallel.

Model Differences

All models are of identical mechanical and electrical design except that the output modules are configured with different parallel/series configuration options, each output modules are identical except L201, L202 and planar T201 secondary circuits.

All models are provided with a power platform and various combinations of output modules.

Power Platform Chassis:

Max total output power between 800W and 1330 W (100-240 Vac) according to input at 50C ambient, half load at 70C ambient: up to four output modules provided. See Misc ID 7-01 for derating output

Output Module Ratings:

Module A: 12Vdc, 260 W max.

Module B: 15Vdc, 330 W max.

Module C: 18Vdc, 243 W max.

Module D: 24Vdc, 330 W max.

Module F: 30Vdc, 207 W max

Module G: 36Vdc, 249W max.

Module H: 48Vdc, 330 W max.

Module J: 60Vdc, 330 W max.

Module O: Blank plate, no module provided

Test Item Particulars

Product group	built-in component
Classification of use by	Ordinary person
Supply Connection	AC Mains
Supply tolerance	+10%/-10%
Supply connection – type	For building-in

Considered current rating of protective device	20 A; Location: building
Equipment mobility	for building-in
Over voltage category (OVC)	OVC II
Class of equipment	Class I
Special installation location	N/A
Pollution degree (PD)	PD 2
Manufacturer's specified Tma (°C)	Full-rated output load: 50°C. 75% of output load: 60°C. Half-rated output load: 70°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)	1.4kg Approx.

Technical Considerations

- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of : 50°C ambient at Full Rated Output and 50% of the Rated Output in 70°C ambient. See Enclosure Misc ID 7-01
- The product is intended for use on the following power systems : TN
- Considered current rating of protective device as part of the building installation (A) : 20
- Mains supply tolerance (%) or absolute mains supply : +10%/-10%
- The equipment disconnect device is considered to be : To be determined in the end-product.
- The Risk Group of a lamp or lamp system (including LEDs) is : Exempt, LEDs for indication only
- The following are available from the Applicant upon request : Installation (Safety) Instructions / Manual
- The product was investigated to the following additional standard : EN 62368-1:2014 + A11:2017
- Required Clearances have been adjusted by multiplying the clearance at sea level by a factor of 1.48 for operating at an altitude of 5000 meters. The correction factor is based on barometric pressure of 62kPa. If the calculated Clearance exceeded the Creepage, the Creepage was adjusted to the value of clearance.

Engineering Conditions of Acceptability

For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC. When installed in an end-product, consideration must be given to the following:

- The following product-line tests are conducted for this product : Electric Strength
- The end-product Electric Strength Test is to be based upon a maximum working voltage of : Primary-Earthed Dead Metal: 240 Vrms, 340 Vpk, Primary-SELV: T101: 632Vpk/355Vrms; Planar T201: 840Vpk/414Vrms
- The following output circuits are at ES1 energy levels : All Outputs, unless connected in series. See below C of A for Max Voltage
- The following output circuits are at ES2 energy levels : All Outputs, for certain combinations of output modules connected in series.
- The following output circuits are at PS3 energy levels : All Outputs
- The maximum investigated branch circuit rating is : 20 A
- The investigated Pollution Degree is : 2
- Proper bonding to the end-product main protective earthing termination is : Required (Class I)
- An investigation of the protective bonding terminals has : been conducted
- The following input terminals/connectors must be connected to the end-product supply neutral : Terminal marked "N" on the supply connector (TB1)
- The following end-product enclosures are required : Mechanical, Fire, Electrical
- The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C) : T101 (Class F)
- The equipment is suitable for direct connection to : AC mains supply
- The power supply was evaluated to be used at altitudes up to : 5,000 m
- When installed in a Class I end product, the power supply shall be mounted in a manner that provides the Basic insulation required Clearance between the primary side of power supply and protectively earthed accessible conductive parts.
- A suitable main disconnect device shall be provided in the end product.
- The power supplies covered by this report have a fuse in the neutral of the primary circuit. The need for a marking to warn a service person of the hazards associated with double pole/neutral fusing shall be considered in the end product.
- Consideration to repeating the Touch Current test should be given in the end-product evaluation.
- The power supplies in this report have been subject to Capacitance Discharge testing. However, the end product shall be considered to repeat test if additional AC inlet with line filter circuit will be used in the end application
- Printed Wiring Boards rated min 130°C. Electrolytic Capacitors rated min 105°C. All inductors providing Functional Insulation are suitable up to 130°C.
- The supply terminal (TB1) is suitable for factory wiring. TB1 and the output terminals and/or connectors have not been investigated for field wiring.
- Temperature, Leakage, Earthing, Mechanical, Marking and Dielectric tests are to be considered as part of the end product, investigation.
- Maximum Series connected voltage is 120Vdc. The accessibility and insulation shall be considered during the end application.
- Earthing conductor and further testing need to be considered in the end application
- Models FLX1K3NAPBDHJ-ZZ and FLX1K3NAPBDJJ-ZC were used for test purposes and are considered representative of the entire series with horizontal position, the need to repeat testing on other model configuration and orientation shall be considered in the end product.
- Internal DC fan is MS3, further consideration shall be done in the end application.

Additional Information

The following tests were selected as representative of the test program applicable to model covered by this CBTR:
5.5.2.2. CAPACITOR DISCHARGE AFTER DISCONNECTION OF A CONNECTOR
5.6.6.2. RESISTANCE OF THE PROTECTIVE BONDING SYSTEM
5.7.5. TOUCH CURRENT MEASUREMENT – EARTHED ACCESSIBLE CONDUCTIVE PARTS – Single-Phase Equipment on TN or TT System

These tests have been witnessed for models selected as representative of the standard covered by this report and the applicable test program under Project Number: 4791598933

Nameplate marking provided is considered representative of all models.

CB Test certificates number for components are included under Critical Components Table. In accordance with the current rules of CB Scheme, CB Test certificate is effective for 3 years. Recognizing NCB may challenge the CBTC when certificates are more than 3 years old.

When submitting this Test Report to other Certification Body, the manufacturer is responsible for providing any additional information that the Body may need in order to issue its Mark, including testing for compliance with the applicable collateral standards.

Additional Standards

The product fulfills the requirements of: EN IEC 62368-1:2020+A11:2020, J62368-1(2023), CSA/UL 62368-1:2019

Markings and Instructions

Clause Title	Marking or Instruction Details
Equipment identification marking – Manufacturer identification	Listee's or Recognized Company's 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)
Terminals for external primary power supply conductors	Capital letter "N" located adjacent to a terminal intended exclusively for connection of the primary power neutral conductor
Class I equipment -Terminal for main protective earthing	Provided adjacent to the main protective earthing terminal  (IEC 60417-5019)
Warning to service personnel	Provided on Final Assembled Configured units (e.g. Platform and Module configured with input and output ratings). IEC Symbol (IEC60417-5016) with N for neutral fusing provided on Configuration Label.

Special Instructions to UL Representative

N/A

BD1.0	TABLE: Production-Line Testing Requirements					
BD1.1	**Electric Strength Test Special Constructions – Refer to Generic Inspection Instructions, Part AC for further information.**					
Model	Component	Removable parts	Test probe location	Test V rms	Test V dc	Test Time, s
All models	T101	--	Primary to Secondary	3000	4242	1
All models	T201	--	Primary to Secondary	3000	4242	1
BD1.2	**Earthing Continuity Test Exemptions – This test is not required for the following models:**					
	N/A					
BD1.3	**Electric Strength Test Exemptions – This test is not required for the following models:**					
	N/A					
BD1.4	**Electric Strength Test Component Exemptions – The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test.**					
	N/A					

BE1.0	Sample and Test Specifics for Follow-Up Tests at UL				
Model	Component	Material	Test	Sample (s)	Test Specifics
N/A	-	-	-	-	-