



# Underwriters Laboratories (UL LLC) Safety Certification Report

**Model:** ALM65USXXYY-ZZV (where XX is any number between 12-48 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)

**Device Description:** Power Supply

**Applicant:** XP Power LLC  
15641 Red Hill Ave., Ste. 100  
Tustin, CA 92780 USA

**Manufacturer:** Same as Applicant

**Manufacturing Facility(ies):** XP Power Inc.  
990 Benecia Ave.  
Sunnyvale, CA 94085 USA

XP Power (Kunshan) Ltd  
230 Bin Jiang Nan Rd  
Zhangpu Town  
Kunshan  
Jiangsu 215321 China

XP Power (Vietnam) Co., Ltd.  
Lot D - 4Q-CN  
My Phuoc 3 Industrial Park  
Ben Cat District  
Bin Duong Vietnam

**Report No.:** E146893-D1007-1/A0/C0-UL

**Report (Re)Issue Date:** 2016-3-7

**Base Standard(s):** ANSI/AAMI ES60601-1:2005/(R)2012, CSA CAN/CSA-C22.2 NO. 60601-1:14

**Report Types:** This report consists of the following report types:

[ Yes ] US Certification (UL Recognition)

[ Yes ] CAN Certification (cUL Recognition)

This report covers the Safety evaluation of the referenced model(s) according to the standard(s) specified above.

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## Report Modifications Summary

The following changes were made to this report. If none listed in the below table, this report is the originally issued report.

The following scheme is used throughout this report to reflect the **Report No.**:

(File No.) – (Report Ref. No.) – (x) / A(y) / C(z) – YYY, where:

(x) = Report (Re)Issue No.

(y) = Amendment No.

(z) = Correction No.


YYY = Report Type (UL/CB/IEC)

Date Modified (Year-Month-Day)	Modifications Made (include Report Reference Number)	Modified By

Test Report issued under the responsibility of:



<b>IEC 60601-1</b> <b>Medical electrical equipment</b> <b>Part 1: General requirements for basic safety and essential performance</b>	
Report Reference No.....	E146893-D1007-1/A0/C0-UL
Date of issue.....	2016-3-7
Total number of pages.....	163
Testing Laboratory.....	UL Minneapolis
Address.....	2222 Wooddale Drive, Suite 300, MoundsView, MN 55112, USA
Applicant's name .....	XP Power LLC
Address.....	15641 Red Hill Ave., Ste. 100 Tustin, CA 92780 USA
Test specification:	
Standard .....	IEC 60601-1: 2005 + CORR. 1:2006 + CORR. 2:2007 + AM1:2012 (or IEC 60601-1: 2012 reprint)
Test procedure.....	UL Certification
Non-standard test method.....	N/A
Test Report Form No.....	IEC60601_1J
<b>General disclaimer:</b> The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing UL testing laboratory. The authenticity of this Test Report and its contents can be verified by contacting UL.	

Test item description:	Power Supply	
Trade Mark:	"XP"	
Manufacturer:	Same as Applicant	
Model/Type reference:	ALM65USXXYY-ZZV (where XX is any number between 12-48 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)	
Ratings:	Input: 100-240 V~1.4A, 50/60Hz Output: ALM65US12: 12 Vdc (10.1 - 13.5 Vdc), 5.4 A max., 65W max.; ALM65US15: 15 Vdc (13.5 - 17.0 Vdc), 4.3 A max., 65W max.; ALM65US19: 19 Vdc (17.1 - 21.0 Vdc), 3.4 A max., 65W max.; ALM65US24: 24 Vdc (21.0 - 26.0 Vdc), 2.7 A max., 65W max.; ALM65US48: 48 Vdc (42.1 - 54.0 Vdc), 1.35 A max., 65W max.	
Testing procedure and testing location:		
<input checked="" type="checkbox"/> UL Testing Laboratory:		
Testing location/ address:	UL Minneapolis 2222 Woodale Drive, Suite 300, MoundsView, MN 55112, USA	
Tested by (name + signature):	Haydee Gonzalez	
Approved by (name + signature):	Timothy L. Gambrell	
[ ] Testing procedure: WMT:		
Testing location/ address:		
Tested by (name + signature):		
Witnessed by (name + signature):		
Approved by (name + signature):		

List of Attachments (including a total number of pages in each attachment):

Refer to Appendix A of this report. All attachments are included within this report.

Summary of testing

Tests performed (name of test and test clause):

Testing location:

*Refer to the Test List in Appendix D of this report if testing was performed as part of this evaluation.*

Copy of marking plate

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective owners of these marks.

*Refer to the enclosure(s) titled Marking Plate in the Enclosures section in Appendix A of this report for a copy.*

GENERAL INFORMATION	
Test item particulars (see also Clause 6):	
Classification of Installation and Use:	Portable
Device type (component/sub-assembly/ equipment/ system):	Component
Intended use (Including type of patient, application location):	Stand-alone power supply for use in Medical Electrical Equipment
Mode of Operation:	Continuous
Supply Connection:	Appliance Coupler
Accessories and detachable parts included:	None
Other Options Include:	None
Testing	
Date of receipt of test item(s) .....	2015-04-14, 2015-07-27
Dates tests performed .....	2015-05-06 to 2015-07-16, 2015-09-05
Possible test case verdicts:	
- test case does not apply to the test object .....	N/A
- test object does meet the requirement.....	Pass (P)
- test object was not evaluated for the requirement .....	N/E
- test object does not meet the requirement.....	Fail (F)
Abbreviations used in the report:	
- normal condition: N.C.	- single fault condition: S.F.C.
- means of Operator protection: MOOP	- means of Patient protection: MOPP
General remarks:	
"(See Attachment #)" refers to additional information appended to the report.	
"(See appended table)" refers to a table appended to the report.	
The tests results presented in this report relate only to the object tested.	
This report shall not be reproduced except in full without the written approval of the testing laboratory.	
List of test equipment must be kept on file and available for review.	
Additional test data and/or information provided in the attachments to this report.	
Throughout this report a point is used as the decimal separator.	
The application for obtaining a UL Certification includes more than one factory location .....	Yes
When differences exist; they shall be identified in the General product information section.	



Name and address of factory (ies) .....: XP Power Inc.  
 990 Benecia Ave.  
 Sunnyvale, CA 94085 USA

XP Power (Kunshan) Ltd  
 230 Bin Jiang Nan Rd  
 Zhangpu Town  
 Kunshan  
 Jiangsu 215321 China

XP Power (Vietnam) Co., Ltd.  
 Lot D - 4Q-CN  
 My Phuoc 3 Industrial Park  
 Ben Cat District  
 Bin Duong Vietnam

#### **GENERAL PRODUCT INFORMATION:**

##### **Report Summary**

All applicable tests according to the referenced standard(s) have been carried out.  
 Refer to the Report Modifications page for any modifications made to this report.

##### **Product Description**

Stand-alone power supply for use in Medical Electrical Equipment.

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

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

##### **Additional Information**

Marking label is representative of all models. The nameplate labels included in this report depict the draft artwork for the marking plate pending approval by National Certification Bodies and it will not be affixed to products prior to such approval.

Multiple Location Manufacturer Codes: