

## COVER PAGE FOR TEST REPORT

Product Category:	Power Supplies for Information Technology Equipment Including Electrical Business Equipment
Product Category CCN:	QQGQ, QQGQ7
Test Procedure:	Listing
Product:	Power Supply
Model/Type Reference:	CENT1120AXYFZ, where X represents the output voltage which may be the number 12, 15, 18, 24 or 48; Y indicates the output connector style which may be any number from 00-99; F indicates the C14 type AC inlet; and Z represents non-safety related customer options which may be any number from 00-99.
Rating(s):	Input: 100-240 V~, 50-60 Hz, 2.0 A  Output: CENT1120A12YFZ: 12 V dc/8.33 (100-110 V~); 12 V dc/9.165 A (>110-240 V~) CENT1120A15YFZ: 15 V dc/7.33 A CENT1120A18YFZ: 18 V dc/6.66 A CENT1120A24YFZ: 24 V dc/5.0 A CENT1120A48YFZ: 48 V dc/2.5 A
Standards:	UL 60950-1, 1st Edition, 2007-10-31 (Information Technology Equipment - Safety - Part 1: General Requirements) CSA C22.2 No. 60950-1-03, 1st Edition, 2006-07 (Information Technology Equipment - Safety - Part 1: General Requirements)
Applicant Name and Address:	SL POWER ELECTRONICS CORP BLDG A 6050 KING ST VENTURA CA 93003 UNITED STATES
This Report includes the following parts, in addition to this cover page:	
1. Specific Technical Criteria	

Issue Date: 2008-09-15

Page 2 of 2

Report Reference #

E136791-A9-UL-1

Correction 1 2009-08-21

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 Underwriters Laboratories Inc. ('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 Underwriters Laboratories Inc. (UL) or any authorized licensee of UL.

Test Report By:




David Feusier  
Staff Engineer  
Underwriters Laboratories Inc.

Reviewed By:



Curtis Butler  
Staff Engineer  
Underwriters Laboratories Inc.

## SPECIFIC TECHNICAL CRITERIA

<b>UL 60950-1, First Edition Information technology equipment - Safety- Part 1: General Requirements</b>	
Report Reference No .....	E136791-A9-UL-1
Compiled by .....	David Feusier
Reviewed by .....	Curtis Butler
Date of issue .....	2008-09-15
Standards .....	UL 60950-1, 1st Edition, 2007-10-31 (Information Technology Equipment - Safety - Part 1: General Requirements) CSA C22.2 No. 60950-1-03, 1st Edition, 2006-07 (Information Technology Equipment - Safety - Part 1: General Requirements)
Test procedure .....	Listing
Non-standard test method .....	N/A
<b>Test item</b> description .....	Power Supply
Trademark .....	
Model and/or type reference ..	CENT1120AXYFZ, where X represents the output voltage which may be the number 12, 15, 18, 24 or 48; Y indicates the output connector style which may be any number from 00-99; F indicates the C14 type AC inlet; and Z represents non-safety related customer options which may be any number from 00-99.
Rating(s) .....	Input: 100-240 V~, 50-60 Hz, 2.0 A  Output: CENT1120A12YFZ: 12 V dc/8.33 (100-110 V~); 12 V dc/9.165 A (>110-240 V~) CENT1120A15YFZ: 15 V dc/7.33 A CENT1120A18YFZ: 18 V dc/6.66 A CENT1120A24YFZ: 24 V dc/5.0 A CENT1120A48YFZ: 48 V dc/2.5 A

**Particulars: test item vs. test requirements**

Equipment mobility .....	: movable
Operating condition .....	: continuous
Mains supply tolerance (%) .....	: +6%, -10%
Tested for IT power systems .....	: No
IT testing, phase-phase voltage (V) .....	: N/A
Class of equipment .....	: Class I (earthed)
Mass of equipment (kg) .....	: < 18
Protection against ingress of water .....	: IP X0

**Possible test case verdicts:**

- test case does not apply to the test object : N / A
- test object does meet the requirement .....: Pass
- test object does not meet the requirement : Fail (acceptable only if a corresponding, less stringent national requirement is "Pass")

**General remarks:**

- "(see Enclosure #)" refers to additional information appended to the Test Report
- "(see appended table)" refers to a table appended to the Test Report
- Throughout the Test Report a point is used as the decimal separator

## SPECIFIC INSPECTION CRITERIA

BA1.0	<b>Special Instructions to UL Representative</b>
BA1.1	N/A

BB1.0	<b>Supporting Documentation</b>
BB1.1	<p>The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:</p> <p>A. Authorization - The Authorization page may include additional Factory Identification Code markings.</p> <p>B. Generic Inspection Instructions -</p> <ol style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> </ol>

BC1.0	<b>Markings and instructions</b>	
BC1.1	The following markings and instructions are provided as indicated.	
BC1.2	All clause references are from UL 60950-1, 1st Edition, 2007-10-31 (Information Technology Equipment - Safety - Part 1: General Requirements).	
Standard Clause	Clause Title	Marking or Instruction Details
1.7.1	Power rating - Ratings	Ratings (voltage, frequency/dc, current)
	Power rating - Company identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number
	Power rating - Model	Model Number

BD1.0	<b>Production-Line Testing Requirements</b>						
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 Potential		Test Time, s
	V rms		V dc				
	N/A						
BD1.2	Earthing Continuity Test Exemptions - This test is not required for the following models:						
BD1.3	Electric Strength Test Exemptions - This test is not required for the following models:						
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:						

BE1.0	<b>Sample and Test Specifics for Follow-Up Tests at UL</b>					
BE1.1	Model	Component	Material	Test	Sample(s)	Test Specifics
	N/A					

<b>GENERAL PRODUCT INFORMATION:</b>	
CA1.0	<b>Report Summary</b>
CA1.1	N/A
CB1.0	<b>Product Description</b>
CB1.1	External Power Supply Adapter provided with an appliance inlet, Class I equipment. Power supply is housed in a thermoplastic enclosure.
CC1.0	<b>Model Differences</b>
CC1.1	There are minor component differences between voltage models and the main transformer T1 has differences in number of turns in the secondary windings based on output voltage
CD1.0	<b>Additional Information</b>
CD1.1	This product has been evaluated for use and tested in an ambient of 25°C only as recommended by the manufacturer. Usage outside of this recommended operating ambient may result in elevated component temperature exceeding the allowable limit per the standard.
CE1.0	<b>Technical Considerations</b>
CE1.2	The product was submitted and evaluated for use at the maximum ambient temperature (T <sub>ma</sub> ) permitted by the manufacturer's specification of: 25 °C
CE1.3	The means of connection to the mains supply is: Detachable power cord
CE1.4	The product is intended for use on the following power systems: TN
CE1.5	The equipment disconnect device is considered to be: Appliance inlet
CE1.14	The following are available from the Applicant upon request: Schematic Diagrams

# Certificate



Certificate no.

T 72091259 08

**License Holder:**

SL Power Electronics Corp.  
6050 King Street Bldg. A  
Ventura CA 93003  
USA

**Manufacturing Plant:**

SL Power Electronics Xianghe  
Anping Economic and  
Technical Developing Zone  
  
065402 Xianghe County, Hebei  
China

Test report no.: USA-NLC 30680992 032

Client Reference: Mike McIntyre

Tested to: EN 60950-1:2001+A11

Certified Product: Power Supply

License Fee - Units

contd.

Addition:

Model Designation: CENT1120X1X2X2X3X3X4X5X5

(X1= A-Z; X2X2= 12,15,18,24,48; X3,X5 =0-9;  
X4= F; X1,X3,X5 not safety-relevant)

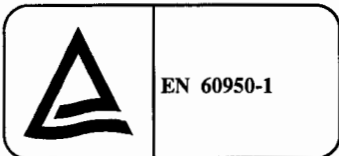
Rated Voltage: 1) AC 100-110/110-240V, 50-60Hz (X2X2= 12)  
2) AC 100-240V, 50-60Hz (X2X2= 15,18,24,48)

Rated Current: 2.0A

Protection Class: I

Output Ratings DC: 1) +12V/8.33A or +12V/9.165A (X2X2=12);  
2) +15V/7.33A (X2X2=15); +18V/6.66A (X2X2=18)  
+24V/5.0A (X2X2=24); +48V/2.5A (X2X2=48) contd.

Licensed Test mark:



Signatures

Date of Issue

(day/mo/yr)

10/07/2009

Stephan Schmitt  
President

Dipl.-Ing. M. Glagla  
QA Certification Officer