

CERTIFICATE OF COMPLIANCE

Certificate Number 20161102-E127643
Report Reference E127643-A298-UL
Issue Date 2016-NOVEMBER-02

Issued to: PHIHONG TECHNOLOGY CO LTD
568 Fu Xing 3rd Rd
Guishan District
Taoyuan
33383 TAIWAN

**This is to certify that
representative samples of**

POWER SUPPLIES, INFORMATION TECHNOLOGY
EQUIPMENT INCLUDING ELECTRICAL BUSINESS
EQUIPMENT

Switching Adapter
PSAC11X-050, PSAC12X-YYY, PSC15X-YYY (X can be A,
R ; Y can be 050, 060, 075, or 090), PSC15R-095,
PSAC12R-060(W)

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07
Information Technology Equipment - Safety - Part 1:
General Requirements

Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's
Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



UL TEST REPORT AND PROCEDURE

Standard:	UL 60950-1, 2nd Edition, 2014-10-14 (Information Technology Equipment - Safety - Part 1: General Requirements) CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information Technology Equipment - Safety - Part 1: General Requirements)
Certification Type:	Listing
CCN:	QQGQ, QQGQ7 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment)
Product:	Switching Adapter
Model:	PSAC11X-050, PSAC12X-YYY, PSC15X-YYY (X can be A, R ; Y can be 050, 060, 075, or 090), PSC15R-095, PSAC12R-060(W)
Rating:	Input: 100-240Vac, 50-60Hz, 0.5A Output: See Enclosure 7-01 for details. (For Model PSC15R-095): I/P: 100-240Vac, 50-60Hz, 0.5A; O/P: 9.5 Vdc, 1.4 A. (For Model PSAC12R-060(W)): I/P: 100-240Vac, 50-60Hz, 0.5A O/P: 5.9Vdc, 1.0A
Applicant Name and Address:	PHIHONG TECHNOLOGY CO LTD 568 FU XING 3RD RD GUISHAN DISTRICT TAOYUAN 33383 TAIWAN

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.

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Prepared by: Nate Hsu

Reviewed by: Eddie Chen

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 product is a Class II switching power adapter with LPS output for use with Information Technology Equipment (ITE). The product consists of electrical components mounted on PWB and all live parts are enclosed in a thermoplastic enclosure.

Model Differences

Model Differences:

1. Model PSC15R-095 which is similar to Model PSC15R-090 except R13 rating, output rating and model designation.
 2. For other Models, see Enclosure 7-01 for details.
- Model PSAC12R-060(W) is similar to Model PSAC12R-060 except for output current rating.

Technical Considerations

- Equipment mobility : direct plug-in or transportable
- Connection to the mains : pluggable A
- Operating condition : continuous
- Access location : operator accessible
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values : +10%, -10%
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : N/A
- Class of equipment : Class II (double insulated)
- Considered current rating of protective device as part of the building installation (A) : 20A
- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m) : not exceeding 3048 meters
- Altitude of test laboratory (m) : not exceeding 2000 meters
- Mass of equipment (kg) : 0.124 kg
- The product was submitted and evaluated for use at the maximum ambient temperature (T_{ma}) permitted by the manufacturer's specification of: 45°C

- The means of connection to the mains supply is: Pluggable A or Direct Plug-in
- The product is intended for use on the following power systems: TN
- The equipment disconnect device is considered to be: Plug, Appliance inlet
- The product was investigated to the following additional standards: Direct Plug-in Equipment comply with UL1310 mechanical assembly requirements. The blade configuration had been evaluated and found compliant with Standard for Wiring Devices-Dimensional Specifications, ANSI/NEMA WD6., The unit was evaluated to be operated up to 3,048 m above sea level per Annex G and the multiplication factor (1.15, linear interpolation used) of table A.2 of IEC 60664-1:1992+A1: 2000+A2: 2002 was applied to determinate the minimum required clearance. The equipment is not for use in aircraft.
- The following circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS): Output Terminal
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual
- Unless otherwise indicated, all tests were performed with Fuse (F1) manufactured by Conquer/MST rated T2 A, 250 Vac.

Additional Information

The equipment is operated up to 3048 m (10000 feet) above sea level as declared by manufacturer. Clearance have been evaluated according to IEC 60664-1 table A.2 with a multiplication factor of 1.15 throughout this report.


Project 4787300763, E127643-A298-UL REVISION Scope:

Switching Adapter, Model PSAC11X-050, PSAC12X-YYY, PSC15X-YYY (X can be A, R ; Y can be 050, 060, 075, or 090) Employing the 1. Adding Model PSC15R-095 which is similar to Model PSC15R-090 except R13 rating, output rating and model designation 2. Removing Heatsink of Q2 for Model PSAC11X-050 and PSAC12X-YYY Series.

Project 4787641491:

Add one new model PSAC12R-060(W) similar to Model PSAC12R-060 except for output current rating from 5.9Vdc, 2.0A to 5.9Vdc, 1.0A.

Markings and instructions

Clause Title	Marking or Instruction Details
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
Power rating - Class II symbol	Symbol for Class II construction  (60417-2-IEC-5172)

Fuses - Non-operator access/soldered-in fuses	Unambiguous reference to service documentation for instructions for replacement of fuses replaceable only by service personnel
Insulation molded on input blade	The length of insulation plastic part molded on each blade was measured more than 5.1mm from edge for Direct Plug-in unit. (see plug description in appended table 1.5.1 for details.)

Special Instructions to UL Representative

Inspect the transformer(s) listed in BD1.1 per AA1.1 - (C). When the tests are conducted at other location, inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100% routine test specified in BD1.1 is conducted at the component manufacturer. The test record noted above shall be submitted to the manufacturer from transformer manufacturer. The test record can be in the form of a actual test record. A stamp or sticker on the transformer or other method verifying the routine test is being completed on 100% production is also acceptable.

Production-Line Testing Requirements

Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for further information.

Model	Component	Removable Parts	Test probe location	V rms	V dc	Test Time, s
All	T1	--	Primary to Secondary	300 0	4242	1

Earthing Continuity Test Exemptions - This test is not required for the following models:

All

Electric Strength Test Exemptions - This test is not required for the following models:

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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:

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Sample and Test Specifics for Follow-Up Tests at UL

Model	Component	Material	Test	Sample(s)	Test Specifics
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