CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference Issue Date 20131004-E127643 E127643-A162-UL 2013-OCTOBER-04

PHIHONG TECHNOLOGY CO LTD Issued to: 568 FU XING 3RD RD, GUISHAN SHIANG **TAOYUAN HSIEN, 33383 TAIWAN** Power Supplies for Information Technology Equipment This is to certify that Including Electrical Business Equipment representative samples of See next page for models Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate. UL 60950-1, Information Technology Equipment - Safety -Standard(s) for Safety: Part 1: General Requirements CSA C22.2 No. 60950-1-03, 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 Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.

The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and

"US" identifiers: "US" the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.

William R. Carney

William R. Carney, Director, North American Certification Programs UL LLC



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Certificate Number Report Reference Issue Date 20131004-E127643 E127643-A162-UL 2013-OCTOBER-04

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

Switching Power Supply,

Models: PSAC05R-050YYY (Y=0-9, A-Z or blank except PSAC05R-050T), PSAC05R-050T, PSAC05R-050, PSAC05R-050(AS), PSAC05R-050TI

William R. Carney

William R. Carney, Director, North American Certification Programs



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UL TEST REPORT AND PROCEDURE

| Standard: | 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) | | |
|-----------------------------|---|--|--|
| Certification Type: | Listing | | |
| CCN: | QQGQ, QQGQ7 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment) | | |
| Product: | Switching Power Supply | | |
| Model: | PSAC05R-050YYY (Y=0-9, A-Z or blank except PSAC05R-050T), PSAC05R-050T, PSAC05R-055, PSAC05R-050(AS), PSAC05R- 050TI | | |
| Rating: | For models PSAC05R-050YYY and PSAC05R-050T, PSAC05R- 050TI: Input: 100 - 240 Vac, 50-60 Hz, 0.3 A; Output: 5 Vdc, 1.0 A. | | |
| | For model PSAC05R-055: Input: 100 - 240 Vac, 50-60 Hz, 0.3 A; Output: 5.5 Vdc, 0.6 A. | | |
| | For model PSAC05R-050(AS): Input: 100 - 240 Vac, 50-60 Hz, 0.3 A; Output: 5 Vdc, 0.9 A. | | |
| Applicant Name and Address: | PHIHONG TECHNOLOGY CO LTD 568 FU XING 3RD RD GUISHAN SHIANG TAOYUAN HSIEN 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 under the indicated Test Property 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 UL LLC (UL) or any authorized licensee of UL.

Prepared by: Iris Lin

Reviewed by: Cary Hsieh / Vincent Lai

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

Electronic Components mounted on PWB and housed in plastic enclosure.

Model Differences

Model PSAC05R-050T is similar to Models PSAC05R-050YYY (Y=0-9, A-Z or blank except PSAC05R-050T) except for RS1, NTC1, C13 and model designation.

Model PSAC05R-055 is similar to model PSAC050R-050YYY except for R12 and output rating.

Model PSAC05R-050(AS) is similar to model PSAC050R-050YYY except for output rating and model designation.

Model PSAC05R-050TI is similar to Model PSAC05R-050T except for additional CY1, different L1/L2 type, PWB layout, circuit, fusing resistor rating and model designation.

Technical Considerations

- Equipment mobility : direct plug-in
- Operating condition : continuous
- Mains supply tolerance (%) : +10%, -10%
- Tested for IT power systems : N/A
- IT testing, phase-phase voltage (V) : N/A
- Class of equipment : Class II (double insulated)
- Mass of equipment (kg) : Max. 0.07 kg
- Protection against ingress of water : IP X0
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 45 degree C for PSAC05R-050YYY, PSAC05R-050T, PSAC05R-055, PSAC05R-050(AS);, 50 degree C for PSAC05R-050TI
- The means of connection to the mains supply is: Pluggable A, Direct Plug-In Unit
- The product is intended for use on the following power systems: TN
- The equipment disconnect device is considered to be: Plug
- The product was investigated to the following additional standards: The unit was evaluated to the maximum acceptable moment, center of gravity, dimensions and weight of the unit in accordance

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with UL 1310 and CSA C22.2 No. 223 and the blade dimension was evaluated to be complied with NEMA configurations in accordance with Wiring Devices-Dimensional Specifications, ANSI/NEMA WD6.

 The following circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS): Models PSAC05R-050YYY, PSAC05R-050T, PSAC05R-050TI: (5 Vdc to Return) Output;, Model PSAC05R-055: (5.5 Vdc to Return) Output.,

Additional Information

10CA28748, employing the alternate (1) replacing the optional fuse (F1) by optional Thermistor (NF1), (2) adding capacitor (C13) for EMC solution, (3) and the consequent PWB Layout change for new Model PSAC05R-050T.

13CA52780, revision:

Add new model PSAC05R-050TI.

Additional Standards

The product fulfills the requirements of: The unit was evaluated to the maximum acceptable moment, center of gravity, dimensions and weight of the unit in accordance with UL 1310, and CSA C22.2 No. 60950-1-03.

| 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 for Class II construction | | |
| Symbol | 山(60417-2-IEC-5172) | | |
| Disconnect device - Pluggable equipment | Statement indicating that the socket-outlet shall be installed near the equipment and shall be easily accessible. (Instruction) | | |
| LPS | (Optional) Marked "LPS" or "Limited Power Supply". | | |
| 1.7.6 Fusible resistor - Rating | Rated wattage, resistant, and reference(location). | | |
| | | | |

Special Instructions to UL Representative

Inspect the transformer listed in PLTR tables. 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 PLTR tables be conducted at the component manufacturer.

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| Production-Line Testing Requirements | | | | | | | | |
|--|---|----------|----------------------|-----|----------|------------|--|--|
| Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for | | | | | | | | |
| further inform | nation. | | | | | | | |
| | Removable | | | V | | Test Time, | | |
| Model | Component | Parts | Test probe location | rms | V dc | S | | |
| All | Transformer | N/A | Primary to Secondary | 300 | 4242 | 1 | | |
| | (T1) | | | 0 | | | | |
| Earthing Cor | Earthing Continuity Test Exemptions - This test is not required for the following models: | | | | | | | |
| All Models | | | | | | | | |
| Electric Strength Test Exemptions - This test is not required for the following models: | | | | | | | | |
| N/A | | | | | | | | |
| Electric Strength Test Component Exemptions - The following solid-state components may | | | | | | | | |
| disconnected from the remainder of the circuitry during the performance of this test: | | | | | | | | |
| | | | | | | | | |
| Sample and Test Specifics for Follow-Up Tests at UL | | | | | | | | |
| | | | | | | Test | | |
| Model | Component | Material | Test | Sa | ample(s) | Specifics | | |
| N/A | | | | | | | | |