

UL TEST REPORT AND PROCEDURE

Standard:	UL 60950-1, 1st Edition, 2007-10-31 (Information Technology Equipment - Safety - Part 1: General Requirements) CAN/CSA C22.2 No. 60950-1-03, 1st Edition, 2006-07 (Information Technology Equipment - Safety - Part 1: General Requirements)
Certification Type:	Component Recognition
CCN:	QQGQ2, QQGQ8 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment)
Product:	Switching Power Supply
Model:	PCSF - 160P - and PCSF - 200P - Where "...." is any alphanumeric character or blank
Rating:	PCSF - 160P - Input: 100-240 Vac, 50/60 Hz, 2.0-1.0 A Output: See Enclosure Id. 7-02 for details. PCSF - 200P - Input: 100-240 Vac, 50/60 Hz, 2.4-1.2 A Output: See Enclosure Id. 7-02 for details.
Applicant Name and Address:	NIPRON CO LTD 2-57 OHAMA-CHO AMAGASAKI-SHI HYOGO-KEN 660-0095 JAPAN

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: Yusuke Enokimura

Reviewed by: Tadao Nakayama

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 products are component Switching Power Supplies for building into Information Technology Equipment (ITE).

Model Differences

Both models are identical except for model designation and rating. The "...." represents any alphanumeric character, or blank.

Technical Considerations

- Equipment mobility : for building-in
- Operating condition : continuous
- Mains supply tolerance (%) : +10%, -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) : 1.0
- Protection against ingress of water : IP X0
- The product was submitted and evaluated for use at the maximum ambient temperature (T_{ma}) permitted by the manufacturer's specification of: Model PCSF - 200P - = 40°C at 100% Full Rated Output., Model PCSF - 160P - = 50°C at 100% Full Rated Output.
- The means of connection to the mains supply is: Detachable Power Supply Cord
- The product is intended for use on the following power systems: TN

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 Production-Line tests are conducted for this product: Electric Strength, Earthing Continuity
- The following secondary output circuits are SELV: All Outputs.
- The following secondary output circuits are at non-hazardous energy levels: All Outputs.
- The following output terminals were referenced to earth during performance testing: 0 V Output.
- The power supply terminals and/or connectors are: Suitable for factory wiring only (Output Connector)

- The investigated Pollution Degree is: 2
- The following end-product enclosures are required: Electrical and Fire
- The equipment is suitable for direct connection to: AC mains supply (Appliance Inlet) , ,

Additional Information

This Test Report was based on the CB Test Certificates Ref. Certif. Nos. NO29908 dated July 15, 2004 and NO29902 dated July 15, 2004 with Test Report Ref. No. N25403 dated July 12, 2004 and was submitted by CB Scheme. The test results and clause verdicts of the above noted report were reviewed and found to comply with the U.S. and Canadian (Bi-National) Standard for Safety for Information Technology Equipment - Safety - Part 1: General Requirements, UL 60950-1 and CAN/CSA-C22.2 No. 60950-1-03, First Edition, dated April 1, 2003. As a result the clause verdicts and test results for this Test Report were noted as N/A and have been referred to the Nemko Test Report for details. All test data has been retained in UL's files.

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

Special Instructions to UL Representative

N/A

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
PCSF - 160P - and PCSF - 200P - Where "...." is any alphanumeric character or blank	Transformer (T1) and Transformer (T3)	N/A	PRI to SEC	300 0	4242	1

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

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

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:

Sample and Test Specifics for Follow-Up Tests at UL

Model	Component	Material	Test	Sample(s)	Test Specifics
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N/A