UL TEST REPORT AND PROCEDURE

Standard:	UL 62368-1, 4th Ed, 2025-07-31 (Audio/Video, information and communication technology equipment Part 1: Safety requirements) CAN/CSA C22.2 No. 62368-1:25, 4th Ed, 2025-07-31 (Audio/video, information and communication technology equipment Part 1: Safety requirements)
Certification Type:	Component Recognition
CCN:	QQJQ2, QQJQ8 (Power Supplies for Use in Audio/Video, Information and Communication Technology Equipment)
Complementary CCN:	N/A
Product:	DC Power Supply
Model:	SFXL-700Px (where x maybe maximum 20 characters, any alphanumeric character, hyphen, slash or blank)
Rating:	Input: 100-240V~, 50-60Hz, 6.5-2.7A Output: CH1: 3.3Vdc, 12.0A (16.0A peak) CH2: 5Vdc, 16.0A (16.0A peak) CH3: 12Vdc, 47.5A (57.0A peak) CH4: -12Vdc, 0.2A (0.2A peak) CH5: 5Vdc, 3.0A (3.5A peak) (CH1+CH2: 83W max) (CH1+CH2+CH3+CH4: 570W max) (CH1+CH2+CH3+CH4+CH5: 575W max)
Applicant Name and Address:	NIPRON CO LTD 2-57 OHAMA-CHO AMAGASAKI-SHI HYOGO-KEN 660-0095 JAPAN

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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:	Yoshifusa Koyanagi / Project Handler	Reviewed By:	Yuichi Noro / Reviewer

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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 equipment is component type switching power supply for building into an end-product.

Model Differences

Suffixes x denote control numbers which do not affect safety. (x maybe maximum 20 characters, any alphanumeric character, hyphen, slash or blank)

Test Item Particulars

Product group :	built-in component
Classification of use by :	Ordinary person Children likely present
Supply connection :	AC Mains
Supply tolerance :	+ 10 % / - 15 %
Supply connection - type :	pluggable equipment type A - appliance coupler
Considered current rating of protective device :	20 A; Location: building
Equipment mobility :	for building-in
Overvoltage category (OVC) :	OVC II
Class of equipment :	Class I
Special installation location :	N/A
Pollution degree (PD) :	PD 2
Manufacturer's specified Tma :	60 (see Enclosure Id. 07-01 for temperature derating) °C
IP protection class :	IPX0
Power systems :	TN IT - 230 V L-L
Altitude during operation (m) :	3000 m
Altitude of test laboratory (m) :	2000 m or less
Mass of equipment (kg) :	Approximately 1.08 kg

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Technical Considerations

- The equipment disconnect device is considered to be : Appliance inlet
- The product was investigated to the following additional standard : EN IEC 62368-1:2024 + A11:2024, SN EN IEC 62368-1:2024+A11:2024, CSA UL 62368-1:2025 issued July 31, 2025

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 product-line tests are conducted for this product : Electric Strength, Earthing Continuity
- The end-product Electric Strength Test is to be based upon a maximum working voltage of : Primary – Earthed Dead Metal: 382 Vrms/ 540 Vpk, Primary-Secondary: 382 Vrms/ 540 Vpk
- The following output circuits are at ES1 energy levels : All outputs
- The following output circuits are at PS1 energy levels : CH4
- The following output circuits are at PS2 energy levels : CH1, CH2, CH5
- The following output circuits are at PS3 energy levels : CH3 (declared)
- Proper bonding to the end-product main protective earthing termination is : Not required
- An investigation of the protective bonding terminals has : been conducted
- The following end-product enclosures are required : Fire (except for front (AC Inlet) side)
- The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C) : T201, T301 (Class B)
- The power supply terminals and/or connectors are: Suitable for factory wiring only
- X-Capacitors may have variation in capacitance up to 0.47 uF (C401, C403, C404), 0.22 uF (C549, C567) maximum. Therefore, consideration shall be given in controlling the capacitance value in end-product application with respect to capacitance discharge issue.
- Y-Capacitors may have variation in capacitance up to 2200 pF (C4, C24, C45), 100 pF (C79) maximum. Therefore, consideration shall be given in controlling the capacitance value in end product application with respect to touch current issue.
- Peak current of Output is not evaluated in this report by applicant’s request.
- The product was evaluated to be used in tropical climates conditions.
- This component has been evaluated in ‘control of fire spread’ method assuming appropriate fire enclosure is provided in end product. Unless the fire enclosure is made of non-combustible or V-0 material, the separation from the PIS shall be considered.
- Front side (AC Inlet side) surface was evaluated as fire enclosure. All sides surface except for Front side surface shall be evaluated in the end-product. Also, all sides surface were evaluated as electrical enclosure.
- Regarding tested mounting position, see Enclosure Id. 07-01. If the power supply is installed in the end-product with a different mounting orientation, additional evaluation will be required.

Additional Information

Regarding test condition, see Enclosure Id: 07-01 for details.

Unless otherwise stated, all tests were conducted with DC Power Supply, Model SFXL-700P with Fan, Type MMF-08R12DH, because air flow of Fan, Type MMF-08R12DH is lower than that of Fan, Type 9GA0812H.

The marking plate label provided is representative of all series models because the required information except for model name is same as representative.

Markings and Instructions	
Clause Title	Marking or Instruction Details
Hazardous sharp edges - symbol	The symbol  (IEC 60417-6043)
Equipment identification marking – Manufacturer identification	Listee's or Recognized Company's name, Trade Name, Trademark or File Number
Equipment identification marking – model identification	Model Number
Equipment rating marking – ratings	Input Ratings (voltage, frequency/dc, current/power)
Symbols - On/Off switch	Switches to be marked with symbol for "ON" (IEC 60417-5007) and  symbol for "OFF" (IEC 60417-5008)
Fuses – replaceable by skilled person	"250V T12A" marked adjacent to fuse (F401).
Special Instructions to UL Representative Inspect the transformer(s) listed below 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 below be conducted at the component manufacturer.	

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BD1.0	TABLE: Production-Line Testing Requirements					
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 V rms	Test V dc	Test Time, s
SFXL-700Px	Transformers (T201, T301)	--	Primary to Secondary	4000pk	4000	1
BD1.2	**Earthing Continuity Test Exemptions – This test is not required for the following models:**					
	N/A					
BD1.3	**Electric Strength Test Exemptions – This test is not required for the following models:**					
	N/A					
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.**					
	N/A					

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

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