File E161936
Project 99SC40066

June 18, 1999

REPORT

ON

COMPONENT - POWER SUPPLIES,
INFORMATION TECHNOLOGY EQUIPMENT,
INCLUDING ELECTRICAL BUSINESS EQUIPMENT

Nihon Protector Co., Ltd.
Hyogo-Ken, Japan

DESCRIPTION

PRODUCT COVERED:

USR/CNR: Component - Power Supply, Model NSP2-250-XXXX. The "X" designation can represent any number from 0-9 or any letter from A-Z or blank.

ELECTRICAL RATING:

	Input			Output (dc)	
Model	V	A	Hz	V	A
NSP2-250-XXXX	100-240	3.8-1.6	50/60	+5	1.5-20
				+3.3	10
				+12	7
				-5	0.5 (Option)
				-12	0.5
				+5	1

Note: Model NSP2-250-XXXX employs an additional charging/discharging circuit for the battery (rated 24 V, maximum 4 A/h) for back-up power. It activates to discharging mode when the supply source is disconnected.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Special Considerations - The following items are considerations that were used when evaluating this product.

USR/CNR indicate investigation to the U.S. and Canadian (Bi-National) Standard for Safety of Information Technology Equipment, Including Electrical Business Equipment, CAN/CSA 22.2 No. 950-95, UL 1950, Third Edition, including revisions through revision date March 1, 1998, which are based on the Fourth Amendment to IEC950, Second Edition.

The component was submitted by the manufacturer for use in a maximum air ambient of 50°C.

The equipment is considered: Class I (earthed), pluggable Type A and/or B, intended for use on a TN power system.

Disconnect Device - The following component is considered the equipment disconnect device: Appliance Inlet.

Conditions of Acceptability - When installed in the end product, consideration shall be given to the following:

1. This component has been judged on the basis of the required spacings in the Standard for Safety of Information Technology Equipment, Including Electrical Business Equipment, CAN/CSA C22.2 No. 950-M95 and UL 1950, Third Edition, including revisions through revision date March 1, 1998, which are based on the Fourth Amendment to IEC950, Second Edition, Sub-clause 2.9, which would cover the component itself if submitted for Listing.

2. All secondary outputs are SELV and are not hazardous energy levels.

3. The terminals and connectors are suitable for factory wiring only.

4. The maximum working voltage present is 800 V peak. The electric strength tests in the end product shall be based on this value.

5. The equipment has been evaluated for use in a Pollution Degree 2 environment.

6. A suitable Electrical and Fire enclosure shall be provided.

*7. Model NSP2-250-XXXX was tested with the lead-acid battery pack, Types PS2538, PS2565, PS2538L, PS2565L, PS2616, PS2616L, PS2571, PS2698L or PS2716.

If used with other types of battery packs in the end-product, additional testing may be necessary.

*8. The output of battery packs, Types PS2538, PS2565, PS2538L, PS2565L, PS2616, PS2616L, PS2571, PS2698L and PS2716 are SELV, and are hazardous energy level.

9. A heating test shall be conducted in the end-product. Consideration should be given to measuring the temperature on power electronic components, transformer windings when the power supply is installed in the end-product. Transformers (T1, T3, T4, T701, T702) and Inductor (LF101) employ a Class A electrical insulation system.