File E186249
Project 05CA27142

September 23, 2005

REPORT

On

COMPONENT - POWER SUPPLIES, INFORMATION TECHNOLOGY EQUIPMENT

Astec International Limited Philippines Branch
Quezon City 1110, Philippines

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Switching Power Supply, Model DS850-3 for use in Information Technology Equipment.

ELECTRICAL RATINGS:

MODEL	INPUT	OUTPUT	
DS850-3	100 - 240 V AC 12 A 50 / 60 Hz	+ 3.3 V aux + 12 V dc	6 A max 70 A max

Maximum Combined Output Power is 850 W.

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE USE):

General – The unit is for use in product where the acceptability of the combination is determined by Underwriters Laboratories Inc.

* Both USR and CNR indicate investigation to the Standard for Safety of Information Technology Equipment, **UL 60950-1, 2nd Edition, 2014-10-14; CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10**.

Conditions of Acceptability – When installed in the end-use equipment, the following are the considerations to be made:

1. This component has been judged on the basis of the required creepages and clearances in the Second Edition of the Standard for Safety of Information Technology Equipment, UL 60950-1, Second **Edition, 2014-10-14** and CAN/CSA C22.2 No. **60950-1-07, 2nd Edition, 2014-10,** Sub-clause 2.10 and Annex G (altitude requirement), which covers the end-use product for which the component was designed. The functional insulation has been evaluated by conducting Component Failure Test per Sub-clause 5.3.4(c) of UL 60950-1, Second **Edition, 2014-10-14** and CAN/CSA C22.2 No. **60950-1-07, 2nd Edition, 2014-10.**

2. This power supply has only been evaluated for use in a pollution degree 2 environment.

3. This power supply was evaluated with the assumption that the power source is a TN power system as defined by **UL 60950-1, 2nd Edition, 2014-10-14; CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10**
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4. A suitable fire enclosure shall be provided by end use equipment.

5. This power supply has been evaluated for use in Class I equipment as defined in UL 60950-1, Second **Edition, 2014-10-14** and CAN/CSA C22.2 No. **60950-1-07, 2nd Edition, 2014-10** and shall be properly earthed or bonded to earth in the end-use. An additional evaluation shall be made if the power supply is intended for use in other than Class I equipment.

6. +12 V output of the power supply is unearthed energy hazard SELV, while + 3.3 Vaux is unearthed non-energy hazard SELV. Sub-clause 2.2.3.1 per UL 60950-1, Second **Edition, 2014-10-14** and CAN/CSA C22.2 No. **60950-1-07, 2nd Edition, 2014-10** were used to maintain the insulation of SELV from primary circuits.

7. This power supply has been evaluated for use in 25°C and 50°C ambient.

8. Transformers T103, T104, T131, T107 and T402 employ Class F electrical insulation system.

9. The secondary output connector has not been evaluated for field connections.

10. This power supply is classified Level 6 as defined by UL 60950-1, Second **Edition, 2014-10-14** and CAN/CSA C22.2 No. **60950-1-07, 2nd Edition, 2014-10.**

11. The Clearances and Creepage Distances have additionally been assessed for suitability up to 3048 m elevation. Annex G of UL **60950-1, Second Edition, 2014-10-14** & CAN/CSA C22.2 No. **60950-1-07, 2nd Edition, 2014-10** was used in determining the clearance requirement.

12. This power supply has been evaluated and can be operated at forward and reverse fan airflow at full rated load (for construction B only).

13. The following Production-Line tests are 100% conducted for these products: Earthing Continuity test and Electric Strength test.