

File E186249
Project 08CA33272

June 27, 2008

REPORT

On

COMPONENT - POWER SUPPLIES, INFORMATION TECHNOLOGY EQUIPMENT

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Quezon City, Philippines

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DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Switching Power Supply, Model DS1200-3-XXX, where -XXX can be blank, 401, -002 or -005, for use in Information Technology Equipment.

ELECTRICAL RATINGS:

MODEL	INPUT	OUTPUT	
DS1200-3, DS1200-3-401, DS1200-3-005	AC 100 - 127 V	DC + 12 V	83.2 A max.
	12.0 A	DC + 3.3Vsb	6.0 A max.
	50 / 60 Hz		
	AC 200 - 240 V	DC + 12 V	99.8 A max.
DS1200-3-002	7.0 A	DC + 3.3Vsb	6.0 A max.
	50 / 60 Hz		
	AC 100 - 127 V	DC + 12 V	83.2 A max.
	12.0 A	DC + 5.0Vsb	4.0 A max.
DS1200-3-002	50 / 60 Hz		
	AC 200 - 240 V	DC + 12 V	99.8 A max.
	7.0 A	DC + 5.0Vsb	4.0 A max.
	50 / 60 Hz		

HANDLE IN THE FRONT PANEL

Maximum Continuous Output Power at AC 100-127 V ac input is 1000 W at maximum ambient temperature of 55°C.

Maximum Continuous Output Power at AC 200-240 V ac input is 1200 W at maximum ambient temperature of 55°C.

Maximum continuous Output Power at AC 100-127 V ac and 200-240 V ac inputs is *709 W at ambient temperature above 55°C, maximum at 75°C.

Maximum continuous Output Power at AC 100-127 V ac input at reverse fan airflow condition (handle to output connector airflow direction) is 1000 W at maximum ambient temperature of 50°C.

Maximum Continuous Output Power at AC 200-240 V ac input at reverse fan airflow condition (handle to output connector airflow direction) is 1200 W at maximum ambient temperature of 50°C.

Maximum continuous Output Power at AC 100-127 V ac and 200-240 V ac inputs at reverse fan airflow condition (handle to output connector airflow direction) is 560 W at ambient temperature above 50°C, maximum at 70°C.

BEZEL IN THE FRONT PANEL

Maximum Continuous Output Power at AC 100-127 V ac input is 1000 W at maximum ambient temperature of 55°C.

Maximum Continuous Output Power at AC 200-240 V ac input is 1200 W at maximum ambient temperature of 55°C.

Total output power is derated at AC 100-127V input at reverse fan airflow (bezel to output connector airflow direction) to 957 W at maximum ambient temperature of 50°C for front panel with bezel.

Total output power is derated at AC 200-240V input at reverse fan airflow (bezel to output connector airflow direction) to 1170 W at maximum ambient temperature of 50°C for front panel with bezel.

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S 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, Second Edition, dated **October 14, 2014** and CAN/CSA-C22.2 No. 60950-1-07, Second Edition, dated **October 14, 2014**.

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

1. These components have 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 and CAN/CSA C22.2 No. 60950-1-07, Second Edition, 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 and CAN/CSA C22.2 No. 60950-1-07, Second Edition.
2. These components have only been evaluated for use in pollution degree 2 environment.

3. These power supplies have been evaluated with the assumption that the power source is a TN power system as defined by UL 60950-1, Second Edition and CAN/CSA C22.2 No. 60950-1-07, Second Edition.
4. A suitable electrical, mechanical and fire enclosure shall be provided by end use equipment.
5. These power supplies have been evaluated for use in Class I equipment as defined in UL 60950-1, Second Edition and CAN/CSA C22.2 No. 60950-1-07, Second Edition 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. The secondary outputs of the power supply are considered SELV and the output (+12.0V) represents an energy hazard, the unit shall be handled with care during end product installation. Sub-clause 2.2.3.1 per UL 60950-1, Second Edition and CAN/CSA-C22.2 No 60950-1-07, Second Edition were used to maintain the insulation of SELV from primary circuits.
- *7. These power supplies have been evaluated for use up to 55°C at normal fan airflow condition. For power supplies with continuous output power of **709 W** or below, they have been evaluated for use up to 75°C **except for the power supplies with bezel in the front panel.**
8. Transformer T1 and T2 employ Class 155(F) electrical insulation system.
9. The supply and secondary output connector have not been evaluated for field connections.
10. These power supplies are classified as Level 5 as defined by UL 60950-1, Second Edition and CAN/CSA-C22.2 No. 60950-1-07, Second Edition.
11. The Clearances and Creepage Distances have additionally been assessed for suitability up to 3048 m or 10000 ft elevation.
12. The disconnection from the line must be considered in the end system.
13. No energy hazard exists at the PSU outputs in the removed condition.
14. These power supplies were not evaluated for end system mounting. When installed in the end system, the proper evaluation should be considered.
15. The equipment are "Double pole/neutral fusing".
16. These power supplies have been evaluated for use up to 50°C at reverse fan airflow conditions. For power supplies with continuous output power of 560 W or below at reverse airflow conditions, they have been evaluated for use up to 70°C **except for the power supplies with bezel in the front panel.**