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Project 05CA47203

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REPORT

On

COMPONENT - POWER SUPPLIES, INFORMATION TECHNOLOGY EQUIPMENT

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## DESCRIPTION

## PRODUCT COVERED:

USR, CNR Component - Switching Power Supply, Model LPS121 for use in Information Technology Equipment.

## ELECTRICAL RATINGS:

MODEL	INPUT	OUTPUT
LPS121	AC 100 - 250 V 2.5 A 50 / 60 / 440 Hz OR DC 120 V min - 300 V max 2.0 A	FORCED AIR COOLING
		DC + 3.3 V, 36.4 A max
		DC + 12.0 V (Fan-out), 0.5 A max
		DC + 5 VSTBY, 0.5 A max
	CONVECTION COOLING	DC + 3.3 V, 21.2 A max
		DC + 12.0 V (Fan-out), 0.5 A max
		DC + 5 VSTBY, 0.5 A max

- Maximum continuous output power is 120 W at min. 30 CFM forced air cooling.
- Maximum continuous output power is 70 W at natural convection cooling.
- Output derates 2.5% per °C from 50 °C to 70 °C ambient temperature.
- Outputs DC +12.0 V (Fan-out) and DC +5 VSTBY are optional outputs.

**\*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** and CAN/CSA-C22.2 No. 60950-1-07, **Second Edition**.

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 First Edition of the Standard for Safety of Information Technology Equipment, UL 60950-1, **Second Edition**, CAN/CSA-C22.2 No. 60950-1-07, **second Edition** Sub-clause 2.10, which covers the end-use product for which the component was designed. The operational 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. This power supply has only been evaluated for use in Pollution Degree 2 environment.
- \*3. This power supply was evaluated with the assumption that the power source is a TN system as defined by UL 60950-1, **Second Edition** and CAN/CSA-C22.2 No. 60950-1-07, **Second Edition**.
4. A suitable fire, mechanical and electrical enclosure shall be provided by end use equipment.
- \*5. The secondary outputs of the power supply are unearthed non-energy hazard SELV. Sub-clause 2.2.3 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.
- \*6. This power supply has 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.
7. This power supply has been evaluated for use in 25°C and 50°C ambient. Total output power is derated by 2.5% per °C from 50°C to 70°C.
8. Transformers T3 and T5 employ Class F electrical insulation system.
9. The secondary DC output connector and input connector have not been evaluated for field connections.
- \*10. This power supply is classified Level 3 as defined by UL 60950-1, **Second Edition** and CAN/CSA-C22.2 No. 60950-1-07, **Second Edition**.
11. This power supply has not been evaluated for end system mounting. creepage and clearance requirements between primary parts of power supply and system chassis shall be considered in the end system.
12. This power supply has only been evaluated under a specific ventilation set-up for 30 CFM forced air cooling. See ILL. 3 for details.