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Project 04CA34836

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REPORT

On

COMPONENT - POWER SUPPLIES, INFORMATION TECHNOLOGY EQUIPMENT

Astec International Limited Philippines Branch
Quezon City, Philippines

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DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Switching Power Supply, Model LPQ173 for use in Information Technology Equipment.

ELECTRICAL RATINGS:

MODEL	INPUT	OUTPUT
LPQ173	AC 100 - 250 V 4.0 A 50 / 60 Hz OR DC 120Vmin - 300Vmax 4.0 A	FORCED AIR
		V1: DC +3.3 to +5.7 V, 30.0 A MAX
		V2: DC + 12.0 V, 8.0 A MAX
		V3: DC -12.0 to -15.0 V, 3.0 A MAX
		V4: DC +3.3 to +5.7 V, 30.0 A MAX
		DC + 5 VSB, 0.2 A MAX
		CONVECTION COOLING
		V1: DC +3.3 to +5.7 V, 10.0 A MAX
		V2: DC + 12.0 V, 6.0 A MAX
		V3: DC -12.0 to -15.0 V, 0.2 A MAX
	V4: DC +3.3 to +5.7 V, 10.0 A MAX	
	DC + 5 VSB, 0.2 A MAX	

Maximum continuous output power is 175 W at minimum 30 CFM forced air cooling with or without cover.

Maximum continuous output power is 85 W at convection cooling without cover only.

Each output derates 2.5% per degree from 50°C to 70°C ambient temperature, but further investigation will be required if this unit use under the ambient exceeding 50°C.

TECHNICAL CONSIDERATIONS (NOT FOR UL 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 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 **Second** Edition of the Standard for Safety of Information Technology Equipment, UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07, Sub-clause 2.10, which covers the end-use product for which the component was designed. The **functional** insulations have been evaluated by conducting Component Failure Tests per sub-clause 5.3.4 (c) of UL 60950-1 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-S system as defined by UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07, **Second** Edition.
4. A suitable enclosure shall be provided by end use equipment.
- *5. The secondary outputs of the power supply are unearthed non-energy hazard SELV. Sub-clause 2.2.3.1 per UL 60950-1 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 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.
8. Transformers T201, T202, T203 and L801 employ Class F electrical insulation system while T701 employs Class B electrical insulation system.
9. The secondary DC output connector and the input connector have not been evaluated for field connections.
- *10. This power supply is classified as Level 3 as defined by UL 60950-1 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. See ILL. 3 for details.
- *13. The reliability of protective bonding conductor in U-Base shall be evaluated per clause 2.6 of UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07 **Second** Edition in the end system.