File E186249 Project 08CA35676

July 08, 2008

REPORT

On

COMPONENT - POWER SUPPLIES, INFORMATION TECHNOLOGY EQUIPMENT

Astec International Ltd Philippines Branch Quezon City, Philippines

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DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Switching Power Supply, Models 73-580-0001i and iMP8-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XX for use in Information Technology Equipment, where X is any alphanumeric character or blank for specific model designation. See illustration 6 for details.

ELECTRICAL RATINGS:

MODEL	INPUT	OUTPUT
iMP8-XXXX-XXXX- XXXX-XXXX-XXXX XX	AC 100V-240V/200V-240V,	DC + 1.5V - + 60V
	50/60 Hz, 20A	
73-580-0001i	AC 100V-240V/200V-240V, 50/60,Hz 20A/12A	DC + 380V DC +5Vsb, 1A DC +18M1Vcc, 0.1A
*	DC 120V-300V/254V-300V, 20A/12A	DC +18M2Vcc, 0.1A DC +18M3Vcc, 0.1A DC +18M4Vcc, 0.1A DC +18M5Vcc, 0.1A DC +18M6Vcc, 0.1A

Maximum Continuous Output Power at AC 100V-240V input for model iMP8-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX is 1000 W.

Maximum Continuous Output Power at AC 200V-240V input for model iMP8-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX is 1075 W for configurations using DC-DC modules without "i" only.

Maximum Continuous Output Power at AC 200V-240V input for model iMP8-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX is 1200 W for configurations using DC-DC modules with "i".

Maximum Continuous Output Power at AC 100V-240V input for model 73-580-0001i is 1215.8 W Maximum Continuous Output Power at AC 200V-240V input for model 73-580-0001i is 1515.8 W.

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Maximum Continuous Output Power at DC 120V-300V input for model 73-580-0001i is 1215.8 $\ensuremath{\mathtt{W}}$

* Maximum Continuous Output Power at DC **254V-300V** input for model 73-580-0001i is 1515.8 W

iMP8-XXXX-XXXX-XXXXX-XXXXX-XXXXX-XX has up to six output modules, maximum three outputs each. Output voltage set at Factory and marked adjacent to each connector.

* iMP8-XXXX-XXXX-XXXX-XXXX-XXXXX-XXXXX-XX was evaluated for input AC 100V-240V/DC 120V-300V, maximum 1000W and input AC 200V-240V/DC **254V-300V,** maximum 1075W continuous output for configuration using DC-DC modules without "i" only, and maximum 1200W for configuration using DC-DC modules with "i", in a 50°C to 70°C for normal airflow. Airflow is reversible, up to 40°C ambient at 100% output power. Total loading of dual output modules not to exceed 144W and total loading of triple output modules not to exceed 36W.

73-580-0001i is a subassembly of iMP8-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX.

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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, with revision date 2014-10-14 and CAN/CSA-C22.2 No. 60950-1-07, Second Edition, with revision date 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, with revision date 2014-10-14 and CAN/CSA-C22.2 No. 60950-1-07, Second Edition, with revision date 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, with revision date 2014-10-14 and CAN/CSA-C22.2 No. 60950-1-07, Second Edition, with revision date 2014-10.
- 2. This component has only been evaluated for use in pollution degree 2 environment.
- *3. This power supply has been evaluated with the assumption that the power source is a TN power system as defined by UL 60950-1, Second Edition, with revision date 2014-10-14 and CAN/CSA-C22.2 No. 60950-1-07, Second Edition, with revision date 2014-10.
- 4. A suitable electrical, mechanical and 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, with revision date 2014-10-14 and CAN/CSA-C22.2 No. 60950-1-07, Second Edition, with revision date 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. The secondary outputs of the DC/DC modules are considered SELV except for the secondary output of the 48V DC/DC module which exceeds 60 Vdc and is not suitable for SELV. There is a hazardous energy level that exceeds 240VA at the output of all power supplies.
- 7. Model 73-580-0001i and iMP8 power supply series have been evaluated for use in a 50°C ambient at 100% rated load; 70°C ambient with derating of 2.5% of rated output per from 50°C to 70°C; 40°C with reverse air flow at 100% rated load. A 30 cfm external reversible fan was also utilized during testing of model iMP8 series.
- 8. Transformer T501 employs Class 155(F) electrical insulation system.

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- 9. The supply and secondary output connector have not been evaluated for field connections.
- 10. This power supply is classified as Level 5 as defined by UL 60950-1, Second Edition, with revision date 2014-10-14 and CAN/CSA-C22.2 No. 60950-1-07, Second Edition, with revision date 2014-10.
- 11. This power supply can be operated in an elevation of maximum 3048 meters above sea level. Annex G of UL 60950-1, Second Edition, with revision date 2014-10-14 and CAN/CSA-C22.2 No. 60950-1-07, Second Edition, with revision date 2014-10 was used in determining the clearance requirement.
- 12. Earthing terminal at the input connector is considered bonding terminal. Power supply chassis is to be reliably bonded to protective earthing in end use equipment before energized.
- 13. The power supplies were not evaluated for end system mounting. When installed in the end system, the proper evaluation should be considered.
- 14. The following cautionary markings shall be provided in the servicing instructions: Caution: Double Pole / Neutral Fusing
- 15. Additional Fuse, rated 300 Vdc suitable for DC application must be provided in the end-system for DC input.