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File E123535 Project 93SC14614

Issued: December 16, 1993 Revised: February 25, 2009

REPORT

on

COMPONENT - POWER SUPPLIES, INFORMATION TECHNOLOGY EQUIPMENT, INCLUDING ELECTRICAL BUSINESS EQUIPMENT

> Vicor Corp. Andover, MA

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DESCRIPTION

PRODUCT COVERED:

USR, CNR - Component - Switching Power Supply, Mini MegaPAC Series, Model Mpaa-zbbcccccc-dd-xx.

Mp may be replaced by MM, IMM, or IMP

- Item 0. MegaPAC Type z = 1 for Mini MegaPAC
- Item 1. Number of Outputs aa = any number 0 - 20
- Item 2. Number of Modules and FlexPACs bb = any number 0 10
- Item 3. Factory assigned Code (Non-safety related)
 cccccc = any alphanumeric combination of up to 6 characters or
 blanks
- Item 4. MegaPAC configuration Revision (Optional)
 dd = any alphanumeric character or blanks (note: dd = G for RoHs
 compliant)
- Item 5. MegaPAC description (Optional)
 xx = any alphanumeric combination or blanks (note: xx = LL for
 Low Leakage, MI = Mil COTS)

ELECTRICAL RATING:

		Output, (dc)			
Model	V	A	Ηz	V	A
Mini MegaPAC	115-230 or 100-240 Vac 300 Vdc, 6A	25/15	47-500	0-95	200 max

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ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

The Model Mini MegaPAC is built using up to five Recognized (QQGQ2) dcdc converter modules and/or FlexPACs. It can be configured by selecting the desired output voltages of the modules and paralleling similar outputs to provide the output configurations described in the Rating section of this report. All units share the same front end primary circuitry and fan cooling. Finished power supply assemblies are intended to be factory connected within electronic data processing equipment or information technology equipment. The signal connector J10 and the DC power output terminals are considered to be SELV.

*

USR/CNR indicates investigation to the U.S. and Canadian (Bi-National) Standard for Safety of Information Technology Equipment, ANSI/UL60950-1-2011, dated December 19, 2011 and CAN/CSA C22.2 No. 60950-1-07, 2nd Edition + A1:2011 (MOD).

Use - For use only in end-use equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Special Considerations - The following items are considerations that were used when evaluating this product.

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The component was submitted by the manufacturer for use in a maximum air ambient of 40 $^\circ\text{C}.$

Maximum 1000 W continuous output with 38 cfm forced air cooling.

Conditions of Acceptability - When installed in the end-use equipment, consideration shall be given to the following:

- 1. These components have been judged on the basis of the required spacings in the Standard for Safety of Information Technology Equipment, CAN/CSA C22.2 No. 60950-1-07, 2nd Edition + A1:2011 (MOD) / ANSI/UL60950-1-2011, dated December 19, 2011, Sub. Clause 2.10, which would cover the component itself, if submitted for Listing. Minimum spacings between live parts of opposite polarity and between live and dead-metal parts shall be as indicated in Tables 2M and 2N in UL/CSA 60950-1. Spacings (creepages and clearances) are based on the provision of Basic Insulation.
- 2. An acceptable enclosure shall be provided in the end-use.
- The terminals and connectors are suitable for factory wiring only.
- This power supply was evaluated for connection to a TN power system.
- 5. This power supply is considered a Class I product. The power supply shall be properly bonded to the main earthing termination in the end-use.
- 6. Bonding terminals provided on this equipment have not been evaluated as protective earthing terminals.
- 7. The secondary outputs of this power supply are considered SELV up to 48 V.
- 8. This power supply has secondary outputs that exceed 240 VA at a potential of 2 V or more.
- 9. This power supply has been evaluated for use in 40°C ambient.
- 10. All isolating transformer employ a Class A electrical insulation system.
- 11. The individual modules which comprise this unit have earth leakage currents which exceed 3.5 mA at high frequency inputs. For end-product units which operate at input frequencies higher than 63 Hz, the end-product must be provided with industrial type sockets or plugs, and the cross-sectional area of the internal protective earthing conductor may not be less than 1.0 square mm, or the end-product must be additionally evaluated with respect to leakage currents, requirements of UL 60950.