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Underwriters Laboratories Inc.

File E133211 Project 928C04055

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REPORT

ON

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

Astec America Inc. Oceanside, California

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File E133211 Vol. 1 Sec. 11 Page 1 Issued: 7-10-92 and Report Revised: 10-28-93

DESCRIPTION

PRODUCT COVERED

* Component - Switching Power Supply, Information Technology Equipment including Electrical Business Equipment, Model Series VS1-XY-XY and VS3-XY-XY-XY-XY, where X is A, B, C, D, E, F, G, H, K, or L and Y is one, two or three digits 0 through 9, each may be followed by additional suffix numbers. Number of -XY suffixes corresponds with the number of output modules supplied.

ELECTRICAL RATING:

Model	Input		Output do			
Series	Y	<u> </u>	HZ	<u> </u>	<u> </u>	
*V\$1	115-230	15 A max.	50-60	2-48 V dc	1500 W max.	

VS1 has up to two output modules, maximum 3 outputs each. Output voltages set at factory.

* Maximum 1500 W continuous output in a 50°C ambient. Maximum 900 W continuous output in a 70°C ambient evaluated with 112 cfm forced air cooling. Airflow is reversible, up to 40°C at 100% load.

Model		Input			
Output Series	de V	A	Hz	<u> </u>	W
VS3	115-230	15 A max.	50-60	2-48 V dc	1200 - 2000 W max.

VS3 has up to four output modules, maximum 3 outputs each. Output voltages set at factory and marked adjacent to each connector.

Maximum 2000 W continuous output in a 50°C ambient. Maximum 1200 W continuous output in a 70°C ambient evaluated with 156 cfm forced air cooling. Airflow is reversible, up to 40°C at 100% load.

Output Module Code

Output Voltage Code

- A equals 300 watt output module with Single Output. Maximum Output current 60 A.
- equals 600 watt output Y: 0 2 V -X: B module with single output 1 3.3 7 Maximum output current 120 A. 2 5 V 3 12 V equals 900 watt output = С module with single output. Maximum output 180 A. 4 15 V 5 24 V D equals 1200 watt output 6 28 V Module with single output # Maximum output current 240 A 7 = 36 V 2-48 VDC 8 Е equals 250 watt output * 240-25 A module with two outputs. Main output rated max. 25 A 9 48 V -
 - F equals 250 watt output module with three outputs. Main output Rated Max. 25 A Auxiliary Outputs each rated Max. 5 A

Auxiliary outputs rated max. 10 A

- G equals 500 watt output Module with two outputs Main output rated max. 50 A Auxiliary output rated max. 20 A
- H equals 500 watt output
 Kodule with three outputs
 Kain output rated max. 50 A
 Auxiliary outputs each rated
 max. 10 A.

File E133211 Vol. 1 Sec. 11 *Page 2A Issued: 7-10-92 and Report New: 10-28-93

Output Module Code

Output Voltage Code

- R equals 750 watt output Module with single output Maximum output current 150 A
- L equals 1500 watt output
 Module with single output
 Maximum output current 300 A

File E133211 Vol. 1 Sec. 11 *Page 3 Issued: 7-10-92 and Report Revised: 8-24-92

ENGINEERING CONSIDERATIONS (NOT FOR PIELD REPRESENTATIVE USE):

This product was investigated under the Standard for Information Technology Equipment, UL 1950, First Edition, dated March 15, 1989.

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

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

- This component has been judged on the basis of the required spacings in the Standard for Information Technology Equipment, Sub-Clause 2.9, which would cover the component itself if submitted for unrestricted Listing.
- An acceptable enclosure shall be provided in the end-use.
- The terminals and connectors have not been evaluated for field wiring.
- These power supplies were 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.
- Bonding terminals provided on this equipment have not been evaluated as protective earthing terminals.
- 7. These power supplies have outputs that exceed 240 VA at a potential of 2 V or more.

- 8. This power supply has been evaluated for use in a 50°C ambient at full rated output, 70°C ambient at 60% rated output. A 112 cfm external reversible fan was utilized during testing of Model VS1, 156 cfm for Model VS3.
- The outputs of these power supplies are considered SELV.
- 10. The Capacitance Discharge Test should be repeated in the end-use installation with the primary fuse (P1) opened or removed since the voltage across the power aupply terminals was 340 V. peak after 1 second
- 11. The Leakage Current Test should be repeated in the end use installation. A 3.6 mA leakage current was measured. Consideration should be given to marking the end-use product with "high leakage current-earth connection essential before connecting supply."