

File E186249
Project 03CA16314

Issued: July 16, 2003
Revised: June 18, 2004

REPORT

on

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

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Metro Manila, Philippines

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DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Switching Power Supplies, Models AEH80Y48, ALH80Y48, AEH80M48, ALH80M48, **AEH80K48 and ALH80K48** for use in Information Technology Equipment, Including Electrical Business Equipment.

ELECTRICAL RATINGS:

MODEL	INPUT	OUTPUT
AEH80Y48, ALH80Y48	DC +36 - +75 V 5.2 A	DC +1.8 V 80 A max.
AEH80Y48X-X, ALH80Y48X-X	DC +36 - +75 V 5.2 A	DC +1.8 V 80 A max.
AEH80M48 ALH80M48	DC +36 - +75 V 4.4 A	DC +1.5 V 80 A max.
AEH80K48 ALH80K48	DC +36 - +75 V 3.6 A	DC +1.2 V 80 A max.

Maximum continuous output power is 144 Watts for Models AEH80Y48 and ALH80Y48. Maximum continuous output power is 120 Watts for Models AEH80M48 and ALH80M48. **Maximum continuous output power is 96 Watts for Models AEH80K48 and ALH80K48.**

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

General - The units are for use in products 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, Including Electrical Business Equipment, UL 60950-1, First Edition, CAN/CSA-C22.2 No. 60950-1-03.

Conditions of Acceptability - When installed in the end-use equipment, the following are the considerations to be made:

1. These components have been judged on the basis of the required creepages and clearances in the First Edition of the Standard for Safety of Information and Technology Equipment Including Electrical Business Equipment, UL 60950-1 and CAN/CSA-C22.2 No. 60950-1-03, which covers the end-use product for which the component was designed. The functional insulations have been evaluated by conducting Component Failure Test per sub-clause 5.3.4 (C) of UL60950-1 First Edition and CAN/CSA-C22.2 No. 60950-1-03.

2. These power supplies have only been evaluated for use in pollution degree 2 environment.
3. A suitable enclosure shall be provided by end-use equipment.
4. These power supplies should operated under the following conditions:

For Model AEH80Y48 has been evaluated for use with a maximum baseplate temperature of 100°C, and 400 LFM forced air cooling, with maximum load of 80 A for both 36 V and 75 V input.

For Model ALH80Y48 has been evaluated under 400 LFM forced air cooling and the following operating conditions:

- a. Maximum ambient temperature up to 85°C at 36 A
- b. Maximum ambient temperature up to 0°C at 80 A

For Model AEH80M48 has been evaluated under the following operating conditions:

- a. Maximum baseplate temperature up to 100°C at 67 A, with 36 V input under 100 LFM forced air cooling
- b. Maximum baseplate temperature up to 100°C at 72 A, with 75 V input under 100 LFM forced air cooling
- c. Maximum baseplate temperature up to 73°C at 80 A, with 36 V input under 400 LFM forced air cooling
- d. Maximum baseplate temperature up to 67°C at 80 A, with 75 V input under 400 LFM forced air cooling

For Model ALH80M48 has been evaluated under 400 LFM forced air cooling and the following loading conditions:

- a. Maximum ambient temperature up to 30°C at 80 A, with 36 V input
- b. Maximum ambient temperature up to 39°C at 80 A, with 75 V input
- c. Maximum ambient temperature up to 85°C at 48 A, with 36 V input
- d. Maximum ambient temperature up to 85°C at 30 A, with 75 V input

For Model AEH80K48 has been evaluated under 400 LFM forced air cooling and the following loading conditions:

- a. Maximum baseplate temperature up to 100°C at 39.5 A, with 36 V input.
- b. Maximum baseplate temperature up to 100°C at 36.5 A, with 75 V input.
- c. Maximum baseplate temperature up to 85.7°C at 80 A, with 36 V input.
- d. Maximum baseplate temperature up to 87.4°C at 80 A, with 75 V input.

For Model ALH80K48 has been evaluated under 400 LFM forced air cooling and the following loading conditions:

- a. Maximum ambient temperature up to 25°C at 80 A, with 36 V and 75 V input.
- b. Maximum ambient temperature up to 85°C at 40 A, with 36 V input.
- c. Maximum ambient temperature up to 85°C at 31.5 A, with 75 V input.

5. These power supplies are classified as Level 3 as defined by UL60950-1 First Edition and CAN/CSA-C22.2 No. 60950-1-03.
6. These power supplies were not evaluated for end system mounting.
7. The subject products were considered as secondary components. The DC input of the power supply shall be separated from the AC mains by reinforced insulation.
8. Additional evaluation must be conducted at the end system, if the equipment will be supplied from a battery source.
9. These products have no in-line fuse. The end product must provide for protection a fuse (JDYX2), Littelfuse Inc., Type 3AB 314, rated 8 A, 250 V or Listed (JDYX) fuse, rated 8 A, 250 V for Models AEH80Y48 and ALH80Y48, Listed (JDYX) fuse, rated 7 A, 250 V for Models AEH80M48 and ALH80M48. (JDYX2), Bussmann, Type S500, rated 5 A, 250 V or Listed (JDYX) fuse, rated 5 A, 250 V for Models AEH80K48 and ALH80K48.
10. The subject products are not intended to be repaired by service personnel in case of failure or component defect (unit can be thrown away).
11. These products maintain basic insulation between input circuits to output circuits and input circuits to baseplate.
12. The output of power supplies is SELV.