

DESCRIPTION

PRODUCT COVERED:

USR, CNR - Linear Power Supply, Models HAA5-1.5/OVP, HAA15-0.8, HAA24-0.6, HAA512, HTAA-16W, followed by suffix -A. Suffixes after the first hyphen may be replaced by -5XX where X is 0-9. Model may be followed by "G", SXXX or SXXXG, indicating non-safety critical options.

ELECTRICAL RATINGS:

Model	Input			Output (dc)	
	V	A	Hz	V	A +
HAA5-1.5/OVP	100/120/220/240	0.50/0.250	50/60	5 -5	1.5 1.5
HAA15-0.8	100/120/220/240	0.75/0.375	50/60	12 or 15 -12 or -15 or -5	1 or 0.8 1 or 0.8 or 0.4
HAA24-0.6	100/120/220/240	0.75/0.375	50/60	24 -24	0.6 0.6
HAA512	100/120/220/240	0.75/0.375	50/60	5 9 to 15	2 0.5
HTAA-16W	100/120/220/240	0.75/0.375	50/60	5 9 to 15 -9 to -15 or -5	2 0.4 0.4 0.4

+ = Output current rating is (A) derated by 10% at 50 Hz.

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

Use - For use only in (or with) Applicant's Information Technology 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.

USR/CNR indicates investigation to the U.S. and Canadian (Bi-National) Standard for Safety of Information Technology Equipment, CSA C22.2 No. 60950-1 * UL60950-1, First Edition, dated April 1, 2003.

The equipment is considered: For building in Class I (earthed), pluggable Type A or B, intended for use on a TN power system.

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

1. **This component has been judged on the basis of the required spacings in the Standard for Safety of Information Technology Equipment, CSA/UL60950-1, First Edition, dated April 1, 2003, Sub-clause 2.10 which would cover the component itself if submitted for Listing.**
2. The products were tested on a 20 A branch circuit. If used on a branch circuit greater than this, additional testing may be necessary.
3. All secondary output circuits for all models are SELV and are not hazardous energy levels.
4. The terminals and connectors have not been evaluated for field wiring.
5. The power supply shall be properly bonded to the main protective earthing termination in the end product.
6. Magnetic device (e.g. transformer) T1 employ(s) an (OBJY3) electrical insulation system designated Class B.
7. The equipment has been evaluated for use in Pollution Degree 2 environment.
8. A suitable Electrical and Fire enclosure shall be provided.
9. Abnormal Tests were conducted with a UL Listed time-delay fuse rated 250 V, 0.375 A for 220, 230, or 240 V operation and rated 250 V, 0.75 A for 100 or 120 V operation connected in the ungrounded conductor circuit. If a fuse other than noted above is used in the end product, additional testing may be necessary.
10. Bonding terminal provided on this equipment have not been evaluated as protective earthing terminals.
11. These power supplies have been evaluated for use up to a 50°C ambient in accordance with the manufacturer's specifications. The units were loaded to 100% on normal rated load at 60 Hz input and derated by 10% of normal rated load at 50 Hz input. The following units required forced air cooling in order to comply:

<u>Models</u>	<u>Airflow</u>
HAA15-0.8	50 LFM
HAA24-0.6	100 LFM
HTAA-16W	50 LFM

12. The maximum working voltage is 266 V rms; 380 V pk. The Electric Strength Tests in the end product shall be based on this value.