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DESCRIPTION

PRODUCT COVERED:

USR/CNR - Linear Power Supply, Models HCAA-60W-A, HD5-12/OVP, HD12-6.8, HD15-6, HD24-4.8, HD24-501, HD24-702, HD28-4, HD48-3, HD48-703, followed by suffix -A. Suffixes after the first hyphen may be replaced by -5XX where X is 0-9. Model name may be followed by "G" or SXXX or SXXXG indicating non-safety critical options.

ELECTRICAL RATING:

	Input			0	Output (dc)	
Model	V	A	Hz	V	A	W [®]
		_				
HCAA-60W-A	100/120/220/230/240	2/1	50/60	5	6	30
				±12/±15	1	
HD5-12/OVP-A	100/120/220/230/240	2/1	50/60	5	12	60
HD12-6.8-A	100/120/220/230/240	2/1	50/60	12	6.8	81.6
HD15-6-A	100/120/220/230/240	2/1	50/60	15	6	90
HD24-4.8-A	100/120/220/230/240	2/1	50/60	24	4.8	115.2
HD28-4-A	100/120/220/230/240	2/1	50/60	28	4	112
HD48-3-A	100/120/220/230/240	3/1.5	50/60	48	3	144
HD24-501	120	2	50/60	24	4.8	115.2
HD24-702	100/120/220/230/240		50/60	2.75	3.5	90.1
		1.9/0.9				
HD48-703	100/120/220/230/240	2/1	50/60	38.5	3	115.5

 $^{^{\}circ}$ - Maximum continuous output power without forced air cooling when the units operate at 25°C ambient. Some units may require forced air cooling when operated at 50°C. See Conditions of Acceptability for more information.

GENERAL:

Power supplies in this Section are complementary Recognized to Components, Power Supplies, Specialty (QQIJ2).

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

Use - For use only in (or with) complete 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, Including Electrical Business Equipment, CSA C22.2 No. 60950-1/ UL 60950-1, First Edition, dated April 1, 2003.

The equipment is: 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 product, 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, Including Electrical Business Equipment, CSA C22.2 60950-1/ UL 60950-1, 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, except HD48-3-A.
- 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(s) (e.g. transformer, inductor) T1 employ(s) an (OBJY3) electrical insulation system designated Class B.
- 7. The equipment has been evaluated for use in a Pollution Degree 2 environment.
- 8. A suitable Electrical and Fire enclosure shall be provided.
- 9. Abnormal Tests were conducted at 254 V ac with a Listed slow-blow fuse rated per the specification on the silkscreen, connected in the ungrounded conductor circuit. The same type of fuse is to be provided when the unit is installed in the end-use product.
- 10. Bonding terminals provided on this equipment have not been evaluated as protective earthing terminals.

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11. These power supplies have been evaluated for use in a 25, 50 and 70°C ambient in accordance with the manufacturer's specifications. The units were loaded to 100% normal rated load for 25 and 50°C ambient and 40% of normal load for 70°C ambient. At 50°C, the following units required forced air cooling in order to comply with standard requirements.

Model	Required LFM
HCAA-60-A	40
HD5-12/OVP-A	40
HD24-4.8-A	100
HD28-4-A	70
HD48-3-A	75
HD12-6.8-A	100
HD15-6-A	100

- 12. All models have been evaluated to requirements in the Seventeenth Edition of the Standard for Electric Industrial Control Equipment (UL 508).
- 13. Secondary circuits have not been investigated for secondary interconnection or user accessibility.
- 14. The device shall be installed in compliance with the enclosure, mounting, spacing, casualty, markings, and segregation requirements of the end-use application.
- 15. The need for conducting Leakage Current Tests is to be determined as part of the end-product evaluation.
- 16. This power supply has only been evaluated for use in commercial and industrial, controlled environment applications. Spacings evaluation assumes a pollution degree 2 environment.
- 17. The input and output connectors including terminal blocks are not acceptable for field connections and are only intended for connection to mating connectors of internal wiring inside the end-use product. The acceptability of these and the mating connectors relative to secureness, insulating materials, and temperature shall be considered.
- 18. The secondary circuits of these power supplies were not subjected to component fault testing as part of this investigation.