

## DESCRIPTION

## PRODUCT COVERED:

USR/CNR - Linear - Power Supply, Models HN5-9/OVP, HN12-5.1, HN15-4.5, HN24-3.6, HN28-3, CP323, and HN5-702, 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 RATINGS:

Model	Input			Output, (ac) (dc)		
	V	A	Hz	V	A	W@
HN5-9/OVP-A	100/120/220/230/240	2/1	50/60	5	9.0	45.0
HN12-5.1-A	100/120/220/230/240	2/1	50/60	12	5.1	61.2
HN15-4.5-A	100/120/220/230/240	2/1	50/60	15	4.5	67.5
HN24-3.6-A	100/120/220/230/240	2/1	50/60	24	3.6	86.0
HN28-3-A	100/120/220/230/240	2/1	50/60	28	3.0	84.0
HN5-702	100/120/220/230/240	2/1	50/60	6	5.0	30.0
CP323-A	100/120/220/230/240	2/1	50/60	5	2.0	58.0
				12	4.0	-

@ - 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, CAN/CSA C22.2, No. 60950-1/UL 60950-1, First Edition, 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, CSA/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.
  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 with a UL Listed non-time-delay fuse rated 250 V, 1 A for 220, 230 or 240 V operation and a 250 V, 2 A for 100 or 120 operation connected in the ungrounded conductor circuit.
  10. Bonding terminals provided on this equipment have not been evaluated as protective earthing terminals.
  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.

<u>Model</u>	<u>Required LFM</u>
HN15-4.5-A	75
HN12-5.1-A	75
HN24-3.6-A	80
HN28-3-A	75

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.