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DESCRIPTION

PRODUCT COVERED:

USR, CNR - Component Connectors - 1394 Serial Bus Connectors.

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GENERAL:

These devices are multi-pole connectors employing terminals for surface mount soldering to a printed wiring board.

USR - Indicates investigation to United States Standards, UL 1977, First
Edition.

CNR - Indicates investigation to Canadian National Standards, C22.2 No. 182.3M-1987.

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

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

Conditions of Acceptability - In order to be judged acceptable as a component of electrical equipment, the following conditions should be met.

- 1. These devices have not been tested for interrupting the flow of current by connecting or disconnecting the mating connector. If the devices will be routinely connected or disconnected under load in the end-use application, tests to evaluate the devices' ability to withstand the resulting electrical arc should be considered. The number of make-and-break cycles, the supply voltage and power factor and the current carried by each pole of the device in the test are to be developed based upon the conditions that will be present in the end-use. The Overload, Temperature and Resistance to Arcing Test Sequence in UL 1977, the Standard for Component Connectors for Use in Data, Signal, Control and Power Applications, is an example of a test program that can be used in such an evaluation.
- 2. When subjected to the Temperature Test described in UL 1977, the Standard for Component Connectors for Use in Data Signal, Control and Power Applications, these devices exhibited a maximum temperature rise of 23°C when carrying the rated 1.5 A current. The conductors terminated by the device and other associated components are to be reviewed in the end-use to determine whether the temperature rise from the connector exceeds their maximum operating temperature ratings.

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3. These devices may be used at potentials not exceeding 250 V based on the minimum 3/64 in (1.2 mm) spacings required by UL 1977, the Standard for Component Connectors for Use in Data, Signal, Control and Power Applications. The suitability of the mounting means shall be determined in the end use.

- 4. These devices may be used at potentials not exceeding 40 V based on Dielectric Voltage-Withstand Testing conducted at 1080 V ac in accordance with UL 1977, the Standard for Component Connectors for Use in Data, Signal, Control and Power Applications.
- 5. The electrical and mechanical suitability of the wiring terminals shall be determined in the end use.
- 6. The placement of these devices within the equipment enclosure should be such that spacing between the live parts and the equipment is suitable for the particular application.
- 7. The electrical and mechanical contact between the connector and the printed circuit board is to be determined in the end-use equipment.
- 8. The operating temperature of these devices should not exceed the temperature ratings of the insulating materials. These materials may be used interchangeably at a maximum temperature of 220°C.