

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component Connectors - AMPLIMITE™ Hi Current Series

GENERAL:

These devices are single pole and two-pole, utilized in a three pole housing connector, employing contacts of the crimp termination type where the acceptability of the combinations is determined by Underwriters Laboratories Inc.

USR - Indicates investigation to United States Standards UL 1977.

CNR - Indicates investigation to Canadian National Standards C22.2 No. 182.3-M1987.

ELECTRICAL RATING:

Single Conductor-

	No. of Poles	Contact Cat. No.	Wire Size (AWG)	Rating
USR, CNR	1 x 1	1986611/ 1986605	6 to 6	70 A, 400 V
USR	1 x 1	1986611/ 2101726	6 to PCB	70 A, 400 V
CNR	1 x 1	1986611/ 2101726	6 to PCB	65 A, 400 V

Two Conductor-

	No. of Poles	Contact Cat. No.	Wire Size (AWG)	Rating
USR, CNR	2 x 2	1986611/ 1986605	6 to 6	55 A, 400 V
USR, CNR	2 x 2	1986611/ 2101726	6 to PCB	55 A, 400 V

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

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

Conditions of Acceptability - The following are among the considerations to be made when evaluating the device in the end-use product.

Interruption of Current

1. These devices are not suitable for interrupting the flow of current by connecting or disconnecting the mating connector.

Current-Carrying Capability and Current Ratings

2. These devices have been investigated for the currents tabulated with the max temperature and temperature rises as shown.

	No. of Poles	Contact Cat. No.	Wire Size (AWG)	Current	Max Temp, °C	Max Temp Rise, °C
USR, CNR	1 x 1	1986611/ 1986605	6 to 6	70 A	53.8	28.8
USR	1 x 1	1986611/ 2101726	6 to PCB	70 A	60.3	
CNR	1 X 1	1986611/ 2101726	6 to PCB	65 A		29.2

Two Conductor-

	No. of Poles	Contact Cat. No.	Wire Size (AWG)	Current	Max Temp, °C	Max Temp Rise, °C
USR, CNR	2 x 2	1986611/ 1986605	6 to 6	55 A	43.8	18.8
USR, CNR	2 x 2	1986611/ 2101726	6 to PCB	55 A	53.2	28.2

Spacings

3. The placement of these devices within the equipment enclosure should be such that spacing between the live parts and the equipment are suitable for the particular application.

4. The adjacent poles may be used at potentials not exceeding 400 V based on the results of a Dielectric Voltage-Withstand Test.

Insulating Materials

5. The insulating materials used in these devices comply with the direct support and electrical insulation requirements of UL 746C, the Standard for Polymeric Materials - Use in Electrical Equipment Evaluations.

6. These devices employ insulating materials with properties as tabulated below at the minimum thickness employed in the connector housing, the suitability of the insulating materials based on the documented values shall be determined in the end-use application. Please note the values specified in the table when multiple materials are indicated represent the minimum values for the group of materials.

Cat. No.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	RTI Str	Max Operating Temp, °C
445705, 448153, 2101726	A	0.77 mm	V-0	3	0	130	140	130

(#) - Code for Insulating Body Material.

- A. Tyco Raw Material No. 26682
 1. Dielectric strength (kV/mm): 27
 2. CTI: 3

7. The operating temperature of these devices should not exceed the temperature ratings of the insulating materials. These materials may be used interchangeably at a max temperature of 130°C.