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and Report

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component Connector, Series AMPSEAL **16** Connectors

GENERAL:

These devices are multi-pole connectors intended for factory assembly on copper wire sizes as indicated in Ratings table below where the acceptability of combinations is determined by Underwriters Laboratories Inc. The devices are identified as follows:

USR indicates investigation to United States Standards, UL 1977.

CNR indicates investigation to Canadian National Standards, C22.2 No. 182.3.

RATINGS:

| Series | Pin / Contact | Voltage Vac/Vdc | Ampere (A) | Conductor Sizes, AWG Str |
|-------------------|-------------------|--------------------|---------------|--------------------------------|
| AMPSEAL 16 | 1924579 / 1924580 | 250 | 5 | 20 |
| AMPSEAL 16 | 1924579 / 1924580 | 250 | 6 | 18 |
| AMPSEAL 16 | 776300 / 776299 | 250 | 6 | 18 |
| AMPSEAL 16 | 776300 / 776299 | 250 | 7.5 | 16 |
| AMPSEAL 16 | 776300 / 776299 | 250 | 9 | 14 |

Disconnecting Use - see Sec Gen for required marking

TECHNICAL 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.

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 subjected to the Temperature test with the rated currents and maximum temperature rise values tabulated below.

| Pin / Contact | Wire Size, AWG | Current, A | Maximum Temperature, °C | Maximum Temperature Rise, °C |
|-------------------|----------------|------------|-------------------------|------------------------------|
| 1924579 / 1924580 | 20 | 5 | 43.6 | 18.6 |
| 1924579 / 1924580 | 18 | 6 | 51.3 | 26.3 |
| 776300 / 776299 | 18 | 6 | 39.8 | 14.8 |
| 776300 / 776299 | 16 | 7.5 | 45.5 | 20.5 |
| 776300 / 776299 | 14 | 9 | 45.1 | 20.1 |

3. These devices have been evaluated at potentials of 250 V based on the results of a Dielectric Voltage Withstand Test performed at 1500 Vac.

Insulating Materials

4. 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 | Max Operating Temp, °C |
|----------|-------------------------|----------------------------|-------------|-----|-----|----------|------------------------|
| All | A | 0.56 mm | - | 4 | 0 | 110 | 110 |
| All | B | 0.56 mm | ## | 2 | 0 | 130 | 110 |

(#) - Code for Insulating Body Material.

(##) - Due to minimum thickness being less than the R/C thickness, a 12 mm Flame Test was performed.

A. RM# 703593
 1. Dielectric strength (kV/mm): 19
 2. CTI: 0

B. RM# 703329
 1. Dielectric strength (kV/mm): 17
 2. CTI: 2

Mating Connectors

5. These devices have only been assessed for use with specific types of connectors within their product family. They have not been assessed to operate with any other similar devices from any other manufacturer.

Accessories

6. The accessories that may be provided with these connectors, such as hoods, have not been investigated and their suitability should be determined in the end-use.