

File E28476
Project 4787359329

April 14, 2016

REPORT

on

COMPONENT - CONNECTORS FOR USE IN DATA, SIGNAL,
CONTROL AND POWER APPLICATIONS

Tyco Electronics Corp
Middletown, PA 17057-3170

Copyright © 2016 UL LLC

UL LLC authorizes the above named company to reproduce this Report only for purposes as described in the Conclusion. The Report should be reproduced in its entirety; however to protect confidential product information, the Construction Details Descriptive pages may be excluded.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component Connector,

2P and 3P Latched Poke-in Wire to Wire Connector: Cat. Nos. 2834048-1, 2834048-2, 2834048-3, 2834048-4, 2834049-1, 2834049-2, 2834049-3, 2834049-4, 1-2834049-1, 1-2834049-2, 1-2834049-3, 1-2834049-4, 2-2834049-1, 2-2834049-2, 2-2834049-3, 3-2834049-1, 3-2834049-2, 2834050-1, 2834050-2, 2834050-3, 2834050-4, 2834054-1, 2834054-2, 2834054-3, 2834054-4, 2834055-1, 2834055-2, 2834055-3, 2834055-4, 1-2834055-1, 1-2834055-2, 1-2834055-3, 1-2834055-4, 2-2834055-1, 2-2834055-2, 2-2834055-3, 2834056-1, 2834056-2, 2834056-3, 2834056-4.

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 UL LLC. 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:

Cat. Nos.	Voltage, V ac	Ampere (A)	Conductor Sizes, AWG Solid/Tin- Dipped Stranded
2834048-1, 2834048-2, 2834048-3, 2834048-4, 2834049-1, 2834049-2, 2834049-3, 2834049-4, 1-2834049-1, 1-2834049-2, 1-2834049-3, 1-2834049-4, 2-2834049-1, 2-2834049-2, 2-2834049-3, 3-2834049-1, 3-2834049-2, 2834050-1, 2834050-2, 2834050-3, 2834050-4, 2834054-1, 2834054-2, 2834054-3, 2834054-4, 2834055-1, 2834055-2, 2834055-3, 2834055-4, 1-2834055-1, 1-2834055-2, 1-2834055-3, 1-2834055-4, 2-2834055-1, 2-2834055-2, 2-2834055-3, 2834056-1, 2834056-2, 2834056-3, 2834056-4	600	3	20-24
		8	16-18
		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 UL LLC.

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 and recorded temperature (adjusted to 25°C ambient) values tabulated below:

Cat Nos.	Current, A	Conductor Sizes, AWG	Maximum Temperature °C	
			Rise	Recorded Temperature
2834048-1, 2834048-2, 2834048-3, 2834048-4, 2834049-1, 2834049-2, 2834049-3, 2834049-4, 1-2834049- 1, 1-2834049-2, 1-2834049-3, 1- 2834049-4, 2-2834049-1, 2- 2834049-2, 2-2834049-3, 3- 2834049-1, 3-2834049-2, 2834050- 1, 2834050-2, 2834050-3, 2834050- 4, 2834054-1, 2834054-2, 2834054- 3, 2834054-4, 2834055-1, 2834055- 2, 2834055-3, 2834055-4, 1- 2834055-1, 1-2834055-2, 1- 2834055-3, 1-2834055-4, 2- 2834055-1, 2-2834055-2, 2- 2834055-3, 2834056-1, 2834056-2, 2834056-3, 2834056-4	3	24, Solid	9.78	34.78
	3	24, Tin- Dipped Stranded	9.02	34.02
	8	18, Solid	21.85	46.85
	8	18, Tin- Dipped Stranded	21	46
	9	14, Solid	19.73	44.73
	9	14, Tin- Dipped Stranded	16.41	41.41

Insulating Materials

3. 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
Note A	Note C	0.4 mm	V-0	4	3	130	105
Note B	Note C	0.6 mm	V-0	4	3	130	105

Note A: Cat. Nos. 2834048-1, 2834048-2, 2834048-3, 2834048-4, 2834050-1, 2834050-2, 2834050-3, 2834050-4, 2834054-1, 2834054-2, 2834054-3, 2834054-4, 2834056-1, 2834056-2, 2834056-3, 2834056-4.

Note B: Cat. Nos. 2834049-1, 2834049-2, 2834049-3, 2834049-4, 1-2834049-1, 1-2834049-2, 1-2834049-3, 1-2834049-4, 2-2834049-1, 2-2834049-2, 2-2834049-3, 3-2834049-1, 3-2834049-2, 2834055-1, 2834055-2, 2834055-3, 2834055-4, 1-2834055-1, 1-2834055-2, 1-2834055-3, 1-2834055-4, 2-2834055-1, 2-2834055-2, 2-2834055-3.

(#) - Code for Insulating Body Material.

Note C: (Tyco RM#1573672). Refer to "CONSTRUCTION DETAILS" section for manufacturer name and grade designation of insulating body material of these devices.

1. Dielectric strength (kV/mm): -
2. CTI: 0

Terminations

4. Heat Cycling test and Mechanical Sequence tests have not been conducted on the spring action terminal of these devices. The suitability of this spring action terminal shall be considered in the end-use investigation.

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.