

File E28476  
Project 4786311568

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REPORT

on

COMPONENT - Connectors for Use in Data, Signal, Control and Power  
Applications - Component

TYCO ELECTRONICS CORP  
MIDDLETOWN PA 17057-3170

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## DESCRIPTION

## PRODUCT COVERED:

USR, CNR Component Connector, Releasable Poke IN Series, Cat. Nos. 2213301-1, 2213301-2, 2213301-3, 1-2213301-2, **2371867-1**.

USR, CNR Component Connector, Releasable Poke IN Series, Series \*-2834006-\*, Cat. Nos. 2834006-1, 5-2834006-1, 6-2834006-1, 7-2834006-1, 2-2834006-1, 3-2834006-1, 4-2834006-1, 1-2834006-0, 2-2834006-0, 2834006-2, 2-2834006-2, 3-2834006-2, 4-2834006-2, 5-2834006-2, 6-2834006-2, 7-2834006-2, 8-2834006-2, 9-2834006-2, 2834006-3, 2-2834006-3, 3-2834006-3, 4-2834006-3, 5-2834006-3, 6-2834006-3, 7-2834006-3, 8-2834006-3, 9-2834006-3, 2834006-4, 2-2834006-4, 3-2834006-4, 4-2834006-4, 5-2834006-4, 6-2834006-4, 7-2834006-4, 8-2834006-4, 9-2834006-4, 2834006-5, 2-2834006-5, 3-2834006-5, 4-2834006-5, 5-2834006-5, 6-2834006-5, 7-2834006-5, 8-2834006-5, 9-2834006-5, 4-2834006-0, 2834385-2, 5-2834006-0, 6-2834006-0, 7-2834006-0, 8-2834006-0, 1-2834006-1, 1-2834006-2, 1-2834006-3, 1-2834006-4, 1-2834006-5, 1-2834006-6, 1-2834006-7, 1-2834006-8, 1-2834006-9.

## 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 **the US standard as noted in the Test Record.**

\*CNR indicates investigation to Canadian **standard as noted in the Test Record.**

## RATINGS:

Cat. No.	Voltage [Vac/Vdc]	Amper e (A)	Conductor Sizes, AWG [Sol/Str]
2213301-1, 2213301-2, 2213301-3, 1-2213301-2	600	9	No. 18
		5	Nos. 20 - 22
Series *-2834006-*, 2834385-2	400	6	No. 18
		5	Nos. 20 - 22
<b>2371867-1</b>	<b>240</b>	<b>10.2</b>	<b>Nos. 12-14 (sol)</b>  <b>*No. 16-18 str. (solder dipped)</b>

**\*Factory Wiring only**

Flammability - V0

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 values tabulated below.

Cat. No.	Current, A	Wire Size - AWG Cu	Maximum Temperature Rise, °C
2213301-1, 2213301-2, 2213301-3, 1-2213301-2	9	18 sol	23
	9	18 str	24.5
	5	22 sol (representing 20 sol)	12.9
	5	22 str (representing 20 str)	13.2
2834006-1, 2834006-2, 2834006-3, 2834006-4, 2834006-5, 1-2834006-2	6	18	12.3
	5	22	21.9
<b>*2371867-1</b>	<b>10</b>	<b>14</b>	
		<b>18AWG solder dipped</b>	<b>27</b>

## 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
2213301-1, 2213301-2, 2213301-3, 1-2213301-2	A	0.45 mm	V-0	--	--	130	130
	B	0.45 mm	V-0	4	4	130	130
2834006-1, 5-2834006-1, 2834006-2, 2834006-3, 2834006-4, 2834006-5, 4-2834006-0, <b>2834385-2,</b> 1-2834006-2	A	0.4 mm	V-0	-	-	130	130
2-2834006-1, 3-2834006-1, 1-2834006-0, 2-2834006-0, 2-2834006-2, 3-2834006-2, 7-2834006-2, 9-2834006-2, 2-2834006-3, 3-2834006-3, 1-2834006-1, 1-2834006-3, 2-2834006-4, 3-2834006-4, 6-2834006-4, 2-2834006-5, 3-2834006-5	C	0.4 mm	V-0	0	2	120	120
4-2834006-1, 4-2834006-2, 4-2834006-3, 1-2834006-4, 4-2834006-4, 4-2834006-5	D	0.4 mm	V-0	0	2	120	120

Cat. No.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, °C
*5-2834006-2, 6-2834006-2, 8-2834006-2, 5-2834006-3, 6-2834006-3, 7-2834006-3, 8-2834006-3, 9-2834006-3, 1-2834006-5, 1-2834006-6, 1-2834006-7, 1-2834006-8, 1-2834006-9, 5-2834006-4, 7-2834006-4, 8-2834006-4, 9-2834006-4, 5-2834006-5, 6-2834006-5, 7-2834006-5, 8-2834006-5, 9-2834006-5, 5-2834006-0, 6-2834006-0, 7-2834006-0, 8-2834006-0	A or C	0.4 mm	V-0	-	-	120	120
6-2834006-1, 7-2834006-1	C	0.4 mm	V-0	0	2	120	120
<b>2371867-1</b>	<b>E</b>	<b>0.6 mm</b>	<b>V-0</b>	<b>0</b>	<b>0</b>	<b>130</b>	<b>130</b>

(#) - Code for Insulating Body Material.

- A. Tyco RM# 1573878.
  - 1. Dielectric strength (kV/mm): 39
  - 2. CTI: 4
- B. Tyco RM# 2136400.
  - 1. Dielectric strength (kV/mm): --
  - 2. CTI: 4
- C. Tyco RM# 1573851.
  - 1. Dielectric strength (kV/mm): -
  - 2. CTI: 0
- D. Tyco RM# 2136292.
  - 1. Dielectric strength (kV/mm): -
  - 2. CTI: 0
- E. Tyco RM# 2136700.**
  - 1. Dielectric strength (kV/mm): -**
  - 2. CTI: 2**

#### Mating Connectors

- 4. 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.
- 5. **Connector Cat. No. 2371867-1 employs a wire range of 16-18AWG stranded solder dipped wire on the line side which is installed in the factory only. The grounding and neutral terminals will always be installed in the field.**