

File E28476
Project 4787128076

October 23, 2015

REPORT

On

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

Tyco Electronics Corp
Middletown, PA

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DESCRIPTION

PRODUCT COVERED:

USR, CNR Component Connector, Mid Board Copper receptacle Cat. Nos.
2291316-1, 2291316-2, 2293921-1, 2293921-2, 2293818-1, 2292096-1, 2292096-2,
2292055-1, 2292069-1, 2294186-1, 2294190-1, 2297117-1, 2297117-2, 2314572-1,
2314572-2, 2324869-1, 2324869-2, 2324869-3, 2324869-4, 2324787-1, 2324787-2,
2324734-1, 2323321-1.

**USR, Component Connector, Sliver 2.0 Straddle Mount connector Cat. Nos.
x-2340321-x, x-2340324-x, x-2340326-x, x-2340331-x**

**USR, Component Connector, Sliver 2.0 Receptacle Vertical connector Cat.
Nos. x-2327678-x, x-2327677-x, x-2327679-x, x-2328461-x, x-2333799-x**

**USR, Component Connector, Sliver 2.0 Receptacle Right Angle connector
Cat. Nos. x-2327670-x, x-2327671-x, x-2327672-x, x-2336568-x**

**"x" can be any one digit, 0 thru 9, different combinations mean different
plating thickness, nut quantity, PCB thickness, hold down length, and
packaging style.**

GENERAL:

These devices are multi-pole connectors intended for factory assembly on printed wiring boards 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.

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RATINGS:

Cat. No.	CNR RATING		USR RATING
	Voltage Vac/Vdc	Ampere (A)	
2291316-1	Less than 30V	Less than 1	--
2291316-2			
2293921-1			
2293921-2			
2293818-1			
2292096-1			
2292096-2			
2292055-1			
2292069-1			
2294186-1			
2294190-1			
2297117-1			
2297117-2			
2314572-1			
2314572-2			
2324869-1			
2324869-2			
2324869-3			
2324869-4			
2324787-1			
2324787-2			
2324734-1			
2323321-1			

Cat. No.	Rating	
	Voltage Vac/Vdc	Ampere (A)
x-2340321-x	Less than 30V	--
x-2340324-x		
x-2340326-x		
x-2340331-x		
x-2327678-x		
x-2327677-x		
x-2327679-x		
x-2328461-x		
x-2327670-x		
x-2327671-x		
x-2327672-x		
x-2333799-x		
x-2336568-x		

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 **of models 2291316-1, 2291316-2, 2293921-1, 2293921-2, 2293818-1, 2292096-1, 2292096-2, 2292055-1, 2292069-1, 2294186-1, 2294190-1, 2297117-1, 2297117-2, 2314572-1, 2314572-2, 2324869-1, 2324869-2, 2324869-3, 2324869-4, 2324787-1, 2324787-2, 2324734-1, 2323321-1** have not been subjected to the Temperature test and as a result do not have an assigned current rating for USR. For CNR, the device is rated less than 1 A. The device's current carrying capability is to be reviewed in the end-use by measuring temperatures on the connector housing and/or terminals when current is flowing through the connector under conditions of normal use.

2A. These devices of models x-2340321-x, x-2340324-x, x-2340326-x, x-2340331-x, x-2327678-x, x-2327677-x, x-2327679-x, x-2328461-x, x-2327670-x, x-2327671-x, x-2327672-x, x-2333799-x, x-2336568-x have not been subjected to the Temperature test and as a result do not have an assigned current rating for USR and CNR. The device's current carrying capability is to be reviewed in the end-use by measuring temperatures on the connector housing and/or terminals when current is flowing through the connector under conditions of normal use.

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.

Mid Board Copper receptacle

Cat. No.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, °C
2291316-1	A	0.35 mm	(+)	2	0	240	130
2291316-2							
2293921-1							
2293921-2							
2293818-1							
2292096-1							
2292096-2							
2292055-1							
2292069-1							
2294186-1							
2294190-1							
2297117-1							
2297117-2							
2314572-1							
2314572-2							
2324869-1							
2324869-2							
2324869-3							
2324869-4							
2324787-1							
2324787-2							
2324734-1							
2323321-1							

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Sliver 2.0 straddle mount connector

Cat. No.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, °C
x-2340321-x x-2340324-x x-2340326-x x-2340331-x	B	0.18 mm	(+)	-	-	130	130

Sliver 2.0 Vertical Receptacle Connector

Cat. No.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, °C
x-2327678-x x-2327677-x x-2327679-x x-2328461-x x-2333799-x	A	0.18 mm	(+)	-	-	240	130

Sliver 2.0 Right Angle Receptacle Connector

Cat. No.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, °C
x-2327670-x x-2327671-x x-2327672-x x-2336568-x	A	0.18 mm	(+)	-	-	240	130

Note:

(#) - Code for Insulating Body Material.

(+): Thickness is less than the minimum Recognized material thickness, as such no assigned Flame class.

- A. TYCO RM No. 1573878
1. Dielectric strength (kV/mm): 39
2. CTI: 4
- B. TYCO RM No. 1573013
1. Dielectric strength (kV/mm): -
2. CTI: -

Terminations

4. The suitability of the solder terminal for grounding shall be determined in the end-use.