File E28476
SR9481720-T001

September 26, 2012

REPORT

On

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

TYCO ELECTRONICS CORP
HARRISBURG PA 17111

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component Connector, New GI 2.5 connector series, Cat. Nos. 2, 3, 4, 5, 6, 7 or 8, followed by
-1971793, -1971798, -1971800, -2232546, followed by -1, -2, -3, -4, or -5.

USR, CNR Component Connector, New GI 2.5 connector series, Cat. Nos. 2365066-2 and 2365068-2.

USR Component Connector, New GI 2.5 connector series, Cat. No. 3-, 5-, 7-, followed by 2371349, followed by -6.

USR Component Connector, New GI 2.5 connector series, Cat. No. 2369080, followed by -2, -3, -4.

USR Component Connector, New GI 2.5 connector series, Cat. Nos. 4-2393116-1, 6-2393116-1, 7-2393115-6, 3-2393792-1, 5-2393792-1, 4-2379778-1, 6-2379778-1, 7-2374989-6, 3-2382730-1 and 5-2382730-1.

GENERAL:

These devices are multi-pole connectors intended for factory assembly on printed wiring boards where the acceptability of combinations is determined by Underwriters Laboratories Inc. The devices are identified as follows:

*USR indicates investigation to United States **requirements as noted in the Test Record.**

*CNR indicates investigation to Canadian National **requirements as noted in the Test Record.**

RATINGS:

Series No.	Wire Size, AWG	Voltage Vac/dc	Ampere (A)
1971793, 2365066-2 2371349	22	50	3
	24		2.5
	26		2
	28		1.5
1971798, 1971800, 2232546, 2365068-2 2369080	N/A	50	3
4-2393116-1, 6-2393116-1, 4-2379778-1, 6-2379778-1	22	50	3
	24		2.5
	26		2
7-2393115-6, 3-2393792-1, 5-2393792-1, 7-2374989-6, 3-2382730-1, 5-2382730-1	22	400	3
	24		2.5
	26		2

Disconnecting Use - see Sec Gen for required marking.

NOMENCLATURE:

* The Series 1971793, 1971798 and 1971800, 2232546 are designated as follows:

Example:
2 - 1971793 - 1
A B C

A: - Contact Number, can be 2, 3, 4, 5, 6, 7 and 8.
B: - Series Number, can be 1971793, 1971798, and 1971800, 2232546.
C: - Color Code, can be 1, 2, 3 and 4. 1 = Natural, 2 = Blue, 3 = Red, 4 = Yellow, 5 =black.

The models 2365066-2 and 2365068-2 are designated as follows:

Example:
2365066 - 2
A B

A: - Series Number, can be 2365066, 2365068.
B: - Contact Number, can be 2.

The model 2371349 are designated as follows:

Example:
7 - 2371349 - 6
A B C

A: - Position Number, can be 3, 5 and 7.
B: - Series Number, can be 2371349.
C: - keying Code, can be 6

The model 2369080 are designated as follows:

Example:
2369080 - 4
A B

A: - Series Number, can be 2369080.
B: - Position Number, can be 2, 3 and 4.

The model 2393116 are designated as follows:

Example:

4	-	2393116	-	1
A		B		C

A: - Position Number, can be 4 or 6.
B: - Series Number, can be 2393116.
C: - keying Code, can be 1.

The model 2393115 are designated as follows:

Example:

7	-	2393115	-	6
A		B		C

A: - Position Number, can be 7.
B: - Series Number, can be 2393115.
C: - keying Code, can be 6.

The model 2393792 are designated as follows:

Example:

3	-	2393792	-	1
A		B		C

A: - Position Number, can be 3 or 5.
B: - Series Number, can be 2393792.
C: - keying Code, can be 1.

The model 2379778 are designated as follows:

Example:

4	-	2379778	-	1
A		B		C

A: - Position Number, can be 4 or 6.
B: - Series Number, can be 2379778.
C: - keying Code, can be 1.

The model 2374989 are designated as follows:

Example:

7	-	2374989	-	6
A		B		C

A: - Position Number, can be 7.
B: - Series Number, can be 2374989.
C: - keying Code, can be 6.

The model 2382730 are designated as follows:

Example:

3	-	2382730	-	1
A		B		C

A: - Position Number, can be 3 or 5.
B: - Series Number, can be 2382730.
C: - keying Code, can be 1.

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, maximum temperature values and maximum temperature rise values tabulated below.

Cat. No. Tested	Wire Size, AWG	Current, A	Maximum Temperature, °C	Max. Temperature Rise, °C	Represented Series No.
8-1971793-1 mating with 8-1971798-1	22	3	36.2	6.2	1971793, 1971798, 1971800, 2232546 2371349 2369080
	24	2.5	34.8	4.8	
	26	2	36.6	6.6	
	28	1.5	34.2	4.2	
6-2393116-1 mated with 6-2379778-1	**22**	**3**	**40.0**	**15.0**	**2393116, 2379778**
	24	**2.5**	**38.0**	**13.0**	
	26	**2**	**36.3**	**11.3**	
7-2393115-6 mated with 7-2374989-6	**22**	**3**	**35.5**	**10.5**	**2393115, 2374989, 2393792, 2382730**
	24	**2.5**	**33.8**	**8.8**	
	26	**2**	**33.1**	**8.1**	

These devices with alternated housing and contact have been subjected to the Temperature test with the rated currents, maximum temperature values and maximum temperature rise values tabulated below.

Cat. No. Tested	Wire Size, AWG	Current, A	Maximum Temperature, °C	Max. Temperature Rise, °C	Represented Series No.
8-1971793-1 mating with 8-1971798-1	22	3	36.11	11.11	1971793, 1971798, 1971800, 2232546
	24	2.5	35.31	10.31	
	26	2	34.85	9.85	
	28	1.5	32.04	7.04	2371349 2369080

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, ^{0}C
8-1971793-1	A	0.41 mm	V-0	-	-	130	105
8-1971798-1		0.41 mm	V-0	-	-	130	105
2371349		0.41 mm	V-0	-	-	130	105
2369080		0.41 mm	V-0	-	-	130	105
1971800		0.41 mm	V-0	-	-	130	105
2232546		0.41 mm	V-0	-	-	130	105
2365066-2		0.41 mm	V-0	-	-	130	105
2365068-2		0.41 mm	V-0	-	-	130	105
2393116	**B**	**0.69 mm**	**V-0**	**4**	**3**	**130**	**105**
2393115		**0.69 mm**	**V-0**	**4**	**3**	**130**	**105**
2393792		**0.69 mm**	**V-0**	**4**	**3**	**130**	**105**
2379778	**C**	**0.35 mm**	**V-0**	**-**	**-**	**130**	**105**
2374989		**0.35 mm**	**V-0**	**-**	**-**	**130**	**105**
2382730		**0.35 mm**	**V-0**	**-**	**-**	**130**	**105**

(#) – Code for Insulating Body Material.

A. Tyco Raw Material # 704924
1. Dielectric strength (kV/mm): -
2. CTI: 4

B. Tyco Raw Material # 2401706-1
1. Dielectric strength (kV/mm): -
2. CTI: 2

C. Tyco Raw Material # 2136919-1
1. Dielectric strength (kV/mm): 18
2. CTI: 1

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.

Miscellaneous

5. The enclosure of the device has live parts that may be exposed to user contact when the connector is energized. The device is suitable for use only within an acceptable enclosure.

6. Crimp contacts of series 1971793 are intended for crimp termination on stranded copper conductor using the tooling shown in ILL. 1, Fig. 1 and Fig. 2, for information purpose only.