File E28476 SR9481720-T001

August 10, 2010

REPORT

On

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

TYCO ELECTRONICS CORP HARRISBURG PA 17111

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File E28476 Vol. 4 Sec. 87 Page 1 Issued: 2010-08-10 Vol. 102 Sec. 6 Revised: 2016-09-27

and Report

DESCRIPTION

PRODUCT COVERED:

USR, CNR - Component Connector, AMP Power Double Lock Connector Series.

GENERAL:

These devices are multi-pole connectors intended for factory 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:

Housing Cat.	Terminal Cat.	Wire	3 3.	
No.	No.	(AWG)	V (ac)	Rating, A
1971598-1	177914-1,	26		2
	177914-2, 179592-1, 179592-2 177915-1, 177915-2,	24		2
		22	300	2
		20	300	5
		18		5
	179593-1, 179593-2	16		7
1971598-1	2238096-1	20	300	5
1051600 1	177916-1, 179594-1	26		2
		24		2
		22	200	2
1971600-1	177917-1, 179595-1	20	300	5
		18		5
		16		7
1971599-1	177916-1, 179594-1	26		2
		24		3
		22	200	4
	177917-1, 179595-1	20	300	7
		18		7
	1/9393-1	16		9

File E28476 Vol. 4 Sec. 87 Page 2 Issued: 2010-08-10 Vol. 102 Sec. 6

and Report

RATINGS (Cont'd):

Housing Cat.	Terminal Cat.	Wire	Voltage Rating,	Current
No.	No.	(AWG)	V (ac)	Rating, A
1971611-1	177916-1, 179594-1	26		4
		24		4
	179391 1	22	300	5
	177917-1, 179595-1	20	300	8
		18		8
		16		10

Disconnecting Use - see Sec Gen for required marking.

File E28476 Vol. 4 Sec. 87 Page 3 Issued: 2010-08-10

Vol. 102 Sec. 6 and Report

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 values tabulated below.

Housing Cat	Terminal Cat. No.	Current,	Wire Size, AWG	Maximum Temperature, °C	Maximum Temperature rise, °C
1971598-1	177915-1	7	16	46.8	21.8
	1//915-1	5	20	46.3	21.3
	177914-1	2	26	38.6	13.6
1971600-1	177917-1	7	16	46.8	21.8
		5	20	46.3	21.3
	177916-1	2	26	38.6	13.6
1971599-1	177917-1	9	16	41.7	16.7
		7	20	49.6	24.6
	177916-1	4	22	41.0	16.0
1971611-1 -	177917-1	10	16	38.8	13.8
		8	20	39.1	14.1
	177916-1	5	22	33.8	8.8
		4	26	37.0	12.0

File E28476 Vol. 4 Sec. 87 Page 4 Issued: 2010-08-10 Vol. 102 Sec. 6 Revised: 2016-09-27

and Report

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.

Housing Cat. No.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	IAH	RTI Elec	RTI Str	Max Operating Temp, ^O C
1971598-1, 1971600-1, 1971599-1, 1971611-1	A for Body	0.4	V-0	-	1	65	65	65

(#) - Code for Insulating Body Material.

A. Tyco Raw Material 1573789

1. Dielectric strength (kV/mm): -

2. CTI: 2

Terminations

4. These devices are not suitable for use other than the wire ranges as tabulated below:

Housing Cat. No.	Terminal Cat. No.	Wire (AWG)
	177014 1 177014 0	26
	177914-1, 177914-2, 179592-1, 179592-2	24
1971598-1	177372 1, 177372 2	22
19/1390-1	177015 1 177015 0	20
	177915-1, 177915-2, 179593-1, 179593-2	18
	175555 1, 175555 2	16
1971598-1	2238096-1	20
		26
	177916-1, 1779594-1	24
1971599-1, 1971600-1,		22
1971611-1	177917-1, 1779595-1	20
		18
		16

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File E28476 Vol. 4 Sec. 87 Page 4A Issued: 2010-08-10 Vol. 102 Sec. 6 New: 2016-09-27 and Report

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 are intended for crimp termination on stranded copper conductor using the tooling shown in Ill.9. (For information purposes only).