

CERTIFICATE OF COMPLIANCE

Certificate Number 20140109-E28476
Report Reference E28476-20100706
Issue Date 2014-JANUARY-09

Issued to: TYCO ELECTRONICS CORP
2901 FULLING MILL RD, MIDDLETOWN PA 17057

**This is to certify that
representative samples of**

COMPONENT - CONNECTORS FOR USE IN DATA,
SIGNAL, CONTROL AND POWER APPLICATIONS
NECTOR S Line Connector, Cat. Nos. 293702-1, 293702-2,
293702-3, 293703-1, 293703-2 , 293703-3, 293415-1, and
293415-2

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1977 - Component Connectors for Use in Data, Signal,
Control and Power Applications

Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Recognized Component Mark should be considered as being covered by UL's Recognition and Follow-Up Service.

The UL Recognized Component Mark generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark: , may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual recognitions.

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Recognized Component Mark on the product.



William R. Carney, Director, North American Certification Programs
UL LLC

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DESCRIPTION

PRODUCT COVERED:

USR, NECTOR S Line Connector, Cat. Nos. 293702-1, 293702-2, 293702-3, 293703-1, 293703-2, 293703-3, 293415-1, and 293415-2

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 Standards, UL 1977.

RATINGS: 30 V ac/dc,

Cat No.	Current, A
293415-1, -2	2 (1)
293702-1, -2, -3	5
293703-1, -2, -3	5

Note (1): Outer most contacts, contacts 1 and 3 rated 5A when solely operating concurrently.

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.

Cat No.	Current, A	Maximum Temperature, °C
*293415-2 (representing entire Series)	2	35.4
293415-2 (representing entire Series)- Contacts 1 and 3	5	41.8
*293702-2 (representing entire Series)	5	26.6
*293703-2 (representing entire Series)	5	26.7

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
293415-2	A	0.4 mm	V-0	-	-	240		105
293415-1	B	0.4 mm	(+)	-	-	240		105
293415-1	C	0.4 mm	V-0	-	-	130		105
293415-2	D	0.4 mm	V-0	-	-	130		105
293702-1, 293702-2, 293702-3, 293703-1, 293703-2, 293703-3	E	0.4 mm	V-0	4	3	130		85

(#) - Code for Insulating Body Material.

(+) - Mold subjected UL746C End Product Flame test, 20 mm (3/4 in), as per exception 1 of Par. 7.2 of UL1977.

- *A. TYCO RM # 704105-1
1. Dielectric strength (kV/mm):21
2. CTI: 3
- *B. TYCO RM # 704105-5
1. Dielectric strength (kV/mm):21
2. CTI: 3
- C. TYCO RM # 1573235-1
1. Dielectric strength (kV/mm):--
2. CTI: --
- D. TYCO RM # 1573235-6
1. Dielectric strength (kV/mm):--
2. CTI: --
- E. TYCO RM # 1573716
1. Dielectric strength (kV/mm):--
2. CTI: 2