CERTIFICATE OF COMPLIANCE

20140514-E28476 Certificate Number E28476-20090526 Report Reference **Issue Date** 2014-MAY-14

> TYCO ELECTRONICS CORP Issued to:

> > 2901 FULLING MILL RD

MIDDLETOWN PA 17057-3170

This is to certify that representative samples of Component – Connectors For Use In Data, Signal Control

and Power Applications

See addendum page

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

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

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: N., 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

William R. Carrey

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any au contact a local UL Customer Service Representative at www.ul.com/contactus



CERTIFICATE OF COMPLIANCE

Certificate Number 20140514-E28476

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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Component Connectors, Models DT, followed by 13 or 15, followed by 2, 3, 4, 6, 08, or 12, followed by S or P. Maybe followed by alphanumeric suffixes.

William R. Carney

William R. Carney, Director, North American Certification Programs

UL LLC

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File E28476 Service Request: 1181364

May 26, 2009

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 - Component Connectors, Models DT, followed by 13 or 15, followed by 2, 3, 4, 6, 08, or 12, followed by S or P. Maybe followed by alphanumeric suffixes.

GENERAL:

These devices are multi-pole connectors intended for factory assembly on stranded copper conductors 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: 250V ac/dc, no current rating.

Flammability - V-0

Disconnecting Use - see Sec Gen for required marking.

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NOMENCLATURE:

* DT **13-** 3 S * - **** I II III IV V VI

I - Designates Deutsch DT Series.

II - Indicates Connector Type.

*

13 - Receptacle (male) Right Angle and outlet

15 - Receptacle (male)

III - Indicates Number of Contacts.

12 max.

IV - Indicates Contact Type.

S - Socket

P - Pin

V - Polarizing Position (if applicable).

VI - Special Modifications.

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 not been subjected to the Temperature test and as a result do not have an assigned current rating. 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.
- 3. These devices have been evaluated at potentials of 250~V based on the results of a Dielectric Withstand Test performed at 1500~V ac.

Insulating Materials

- 4. The insulating materials used in these devices, **except for the wedge**, comply with the direct support and enclosure requirements of UL 746C, the Standard for Polymeric Materials Use in Electrical Equipment Evaluations.
- 5. The flame class rating of the insulating materials used in the connector housing is V-0.
- 6. 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.

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Part	Insulating	Measured	Manufacturer	Flame	HWI	HAI	RTI	Max Operating
	Material	Minimum	(File No.)	Class			Elec	Temp, ⁰ C
		Thickness						
		1.80mm						
DT Housing	A		TE Proprietary	(+)	0 (++)	0 (++)	120	65
DT Housing	В	1.80mm	Information	V-0	0	0	140	125

Note:

- (#) Code for Insulating Body Material.
- (+): Thickness is less than the minimum Recognized material thickness, as such no assigned Flame class. UL 746C (12mm) (20mm) Flammability test conducted.
- (++): These PLCs are based on the minimum Recognized material thickness.
- A. TE Proprietary Information
 - 1. Dielectric strength (kV/mm): -
 - 2. CTI: -
- B. TE Proprietary Information
 - 1. Dielectric strength (kV/mm): 23
 - 2. CTI: 2
- *7. The suitability of the insulating materials shall be determined in the end-use application.

Terminations

PWB solder tails.