# CERTIFICATE OF COMPLIANCE

Certificate Number Report Reference Issue Date 20130628-E28476 E28476-20130627 2013-JUNE-28

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
 IDC POWER CONNECTOR

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

Standard(s) for Safety:Standard for Polymeric Materials - Use in Electrical<br/>Equipment Evaluations, UL 746C.Additional Information:See the UL Online Certifications Directory at<br/>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

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



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# File E28476 Project 13ME03261

June 27, 2013

REPORT

on

COMPONENT - Connectors for Use in Data, Signal, Control and Power Applications - Component

# Tyco Electronics Corp Harrisburg, PA

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#### DESCRIPTION

## PRODUCT COVERED:

USR, Component Connectors - IDC POWER CONNECTOR

## GENERAL:

These devices are multi-pole attachment header and receptacle connectors intended for factory assembly on No. 20 AWG str copper wire size (Receptacle) and printed wiring boards (Header) where the acceptability of combination is determined by UL LLC. The devices are identified as follows:

USR indicates investigation to United States Standards, UL 1977.

# RATINGS:

Max Current	Max Voltage (AC/DC)
(Amperes)	
6	250

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ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

Use - For use only in complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Conditions of Acceptability - In order to be judged acceptable as a component of electrical equipment, the following conditions should be met.

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, adjusted to a 25°C ambient.

Current, A	Wire AWG Size - Cu str	Maximum Temperature, °C		
		HEADER	RECEPTACLE	
6	No. 20 AWG	45	49.4	

Insulating Materials

2. 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.

IDC POWER CONNECTOR	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, <sup>0</sup> C
RECEPTACLE 2201304	A	0.45	V2	Ι	Ι	130	130
HEADER 2201305	В	0.7	(+)	- (++)	- (++)	120 (++)	120

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(#) - Code for Insulating Body Material.

(+): Thickness is less than the minimum Recognized material thickness, as such no assigned Flame class. UL746C 12mm Flammability test conducted.

(++): These PLCs are based on the minimum Recognized material thickness.

- A. Tyco Raw Material No. 1573256
  1. Dielectric strength (kV/mm): 32
  2. CTI: 3
- B. Tyco Raw Material No. 26864
  1. Dielectric strength (kV/mm): 22
  2. CTI: 3

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.