

File E28476
Project 11ME08487

February 23, 2012

REPORT

on

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

TYCO ELECTRONICS CORP
HARRISBURG, PA

Recognized Company: TYCO ELECTRONICS CORP

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DESCRIPTION

PRODUCT COVERED:

USR, CNR - Component Connectors, Impact™ Power Connector Series.

Cat Nos. 2169864, 2169864-2, 2169864-1, 2169874, 2-2169874-0, 1-2169874-9, 1-2169874-8, 1-2169874-7, 1-2169874-6, 1-2169874-5, 1-2169874-4, 1-2169874-3, 1-2169874-2, 1-2169874-1, 1-2169874-0, 2169874-9, 2169874-8, 2169874-7, 2169874-6, 2169874-5, 2169874-4, 2169874-3, 2169874-2, 2169874-1.

GENERAL:

These devices are multi-pole connectors employing Compliant Pin terminals for press-fit to a printed wiring board.

RATINGS:

Voltage: 48 Volts DC, Current:

USR, CNR - 3 Pair 15 amperes X 4 circuits, 60 amperes per module
 USR, CNR - 4 Pair 20 amperes X 4 circuits, 80 amperes per module
 USR, CNR - 5 Pair 25 amperes X 4 circuits, 100 amperes per module
 USR, CNR - 6 Pair 20 amperes X 6 circuits, 120 amperes per module

USR - Indicates investigation to United States Standards UL 1977.

CNR - Indicates investigation to Canadian National Standards C22.2 No. 182.3 - M1987.

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 rise and recorded temperature values tabulated below.

Series	Set No.	Current, Amps	Maximum Temperature Rise, °C	Maximum Temperature °C
Impact™ Power Connector	3 Pair X 4 circuits	15	29.6	54.6
Impact™ Power Connector	4 Pair X 4 circuits	20	16.4	41.4
Impact™ Power Connector	5 Pair X 4 circuits	25	19.2	44.4
Impact™ Power Connector	6 Pair X 6 circuits	20	29.1	54.1

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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.

Series	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec, °C	Max Operating Temp, °C
Impact™ Power Connector	A	0.6 mm	V-0	4	4	130	130

(#) - Code for Insulating Body Material.

- A. Tyco RM No. 1573140
 1. Dielectric strength (kV/mm): --
 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.