

File E28476
Project 4788586174

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REPORT

on

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

Tyco Electronics Corp
MIDDLETOWN, PA

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DESCRIPTION

PRODUCT COVERED:

USR Component Connector -

Series M12 L Code Panel Rear Mounted Connector, male, Cat. Nos. T4140L12031-000, T4140L12041-000 and T4140L12051-000.

Series M12 L Code Panel Rear Mounted Connector, female, Cat. Nos. T4141L12031-000, T4141L12041-000 and T4141L12051-000.

GENERAL:

These devices are multiple connectors intended for factory assembly on copper wire sizes as indicated in Ratings table below where the acceptability of combinations is determined by UL LLC. The devices are identified as follows:

USR indicates investigation to United States Standards, UL 1977.

RATINGS:

Cat. Nos	Voltage Vac/dc	Ampere (A)
T4140L12031-000	63	16
T4141L12031-000	63	16
T4140L12041-000	63	16
T4141L12041-000	63	16
T4140L12051-000	63	16
T4141L12051-000	63	16

Disconnecting Use - see Sec Gen for required marking.

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 UL LLC.

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 rise and recorded temperature (adjusted to 25°C ambient) values tabulated below:

Cat Nos.	Wire Size, AWG	Current, A	Maximum Temperature °C		Represent Cat. Nos.
			Rise	Recorded Temperature	
T4140L12051-000	14	16	-	57.3	T4140L12031-000, T4140L12041-000
T4141L12051-000	14	16	-	56.5	T4141L12031-000, T4141L12041-000

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 Nos.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, °C
T4140L12031-000	A	0.3	V-0	4	0	130	85
T4141L12031-000	A	0.4	V-0	4	0	130	85
T4140L12041-000	A	0.3	V-0	4	0	130	85
T4141L12041-000	A	0.4	V-0	4	0	130	85
T4140L12051-000	A	0.3	V-0	4	0	130	85
T4141L12051-000	A	0.4	V-0	4	0	130	85

Note:

(#) - Code for Insulating Body Material.

- A. Tyco RM 1573878-2.
1. Dielectric strength (kV/mm): 39
2. CTI: 4

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.

Cat Nos.	Mating Connector Cat Nos.
T4140L12031-000	T4141L12031-000
T4140L12041-000	T4141L12041-000
T4140L12051-000	T4141L12051-000

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. The identified grounding terminal has not been evaluated for terminating an equipment-grounding conductor. The Grounding Impedance test has not been performed. The suitability of bonding any exposed dead metal parts of the connector shall be considered during the end product investigation.