

File E28476
Project 02ME06829

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REPORT

on

COMPONENT - CONNECTORS FOR USE IN DATA, SIGNAL,
CONTROL AND POWER APPLICATIONS

Tyco Electronics
Harrisburg, PA

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DESCRIPTION

RATINGS: (CONT'D)

Cat. No.	No. of Poles	Wire Size (AWG)	Contact Cat. No.	Max Voltage (V)	Max Current (A)
2333145-4, 2333145-3, 2333145-2, 2333145-1, 1376382-6	2	-	-	300V	@1
2333140-1, 2333140-6	6	-	-	300V	@1
2333147-4, 2333147-3, 2333147-2, 2333147-1	2	24	1376348	300V	3
	2	20	1376348	300V	7
	2	20	1376347	300V	7
	2	16	1376347	300V	10
2333143-1	6	24	1376348	300V	2
	6	20	1376348	300V	5
	6	20	1376347	300V	5
	6	16	1376347	300V	8
X-1376384-Y	Up to 4	16	1376347	300V	8
		20	1376347 or 1376348	300V	5
		24	1376348	300V	2
X-1376385-Y	Up to 6	16	1376347	300V	8
		20	1376347 or 1376348	300V	5
		24	1376348	300V	2
2407038-3, 2407038-4, 2408508-6	2407038-3 (3 poles), 2407038-4 (4 poles), 2408508-6 (6 poles)	16	177917-1	300V	9
		18	177917-1	300V	7
		20	177917-1	300V	6
		20	177916-1	300V	6
		20	2323853-1	300V	6

@1: The current rating of Header assembly is according to the mating plugs showed in ILL. 4

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE 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 - In order to be judged acceptable as a component of electrical equipment, the following conditions should be met.

1. These devices have not been tested for interrupting the flow of current by connecting or disconnecting the mating connector. These devices should be used only where they will not interrupt the current.

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2. When subjected to the Temperature test described in UL 1977, the Standard for Component Connectors for Use in Data, Signal, Control and Power Applications and Canadian National Standards C22.2 No.182.3, these devices exhibited a maximum temperature rise as tabulated below. The conductors terminated by the device and other associated components are to be reviewed in the end-use to determine whether the temperature rise from the connector exceeds their maximum operating temperature ratings

<u>Cat. No.</u>	<u>Poles</u>	<u>Wire Size (AWG)/Contact</u>	<u>Current (A)</u>	<u>Max Temp (°C)</u>	<u>Max Rise (°C)</u>
1376388	2	24/Cat. No. 1376348	3	26.3	5.5
1376388	2	20/Cat. No. 1376348	7	36.2	15.4
1376388	2	20/Cat. No. 1376347	7	36.2	15.4
1376388	2	16/Cat. No. 1376347	10	42.5	21.7
1376393	6	24/Cat. No. 1376348	2	26.8	6.0
1376393	6	20/Cat. No. 1376348	5	38.1	17.6
1376393	6	20/Cat. No. 1376347	5	37.1	16.6
1376393	6	16/Cat. No. 1376347	8	44.1	23.2

Cat. No.	Poles	Contact PN	Wire Size	Current (A)	Max Temp (°C)	Max Rise (°C)
2407038-4 (representing 2407038-3)	4	177917-1	16	9	40.6	15.6
	4	177917-1	18	7	38	13
	4	177917-1	20	6	39.6	14.6
	4	177916-1	20	6	37.4	12.4
	4	2323853-1	20	6	38.8	13.8
2408508-6	6	177917-1	16	9	42.7	17.7
	6	177917-1	18	7	42.5	17.5
	6	177917-1	20	6	43.7	18.7
	6	177916-1	20	6	45	20
	6	2323853-1	20	6	42.9	17.9

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3. These devices may be used at potentials not exceeding 300 V based on Dielectric Voltage-Withstand testing conducted at 1600 V ac in accordance with UL 1977, the Standard for Component Connectors for Use in Data, Signal, Control and Power Applications.

4. Mold Stress Relief testing was conducted at a temperature of 130°C.

5. The operating temperature of these devices should not exceed the temperature ratings of the insulating materials. These materials may be used *interchangeably at a maximum temperature of 65°C.

6. The factory assembled contacts have been subjected to the Conductor Secureness test from UL 1977, the Standard for Component Connectors for Use in Data, Signal, Control and Power Applications, when wired by the connector manufacturer on the following wire ranges:

<u>Part No.</u>	<u>Wire Range (AWG)</u>	<u>Force (lbs)</u>
1376348-1	24 thru 20	8
1376347-1	20	8
1376347-1	16	20

7. These devices employ leads which are not suitable for field wiring.

8. The suitability of the mounting means shall be determined in the end-use.

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9. The placement of these devices within the equipment enclosure should be such that spacings between the live parts and the equipment are suitable for the particular application.

10. The electrical and mechanical contact between the connector and the printed wiring board is to be judged in the end-use equipment.

11. The need to provide additional mounting hardware to mechanically secure the connector to the printed wiring board is to be determined in the **end-use**.

12. The following 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 Temperature, °C
2407038-3, 2407038-4, 2408508-6	A	0.7 mm	V-0	-	-	130

Note:

(#) - Code for Insulating Body Material.

- A. RM No. 2407190
1. Dielectric strength (kV/mm): 26
2. CTI: 0