File E28476
Project 03ME11079

2003-08-13

REPORT

on

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

Tyco Electronics Corp.
Harrisburg, Pennsylvania

DESCRIPTION

PRODUCT COVERED:

USR, CNR - Component Connectors Series Mini Crownedge.

Model Numbers 283-0132-02303, 284-0132-03003, 283-0162-XXXXX, 284-0162-XXXXX, where XXXXX is an alphanumeric code.

USR- Model Number 1766355-x, **2204795-x**

GENERAL:

Electrical Rating:

	250 V	
Cat. Nos.	USR	CNR
283-0132-02303, 284-0132-03003, 283-0162-XXXXX, 284-0162-XXXXX	35 A	25 A
1766355-x	35 A	--

Cat. Nos.	**Contact**	**Current A**	**Voltage V**
2204795-x	**Power**	**25**	**250**
	Signal	**2**	**100**

These devices are multi-pole connectors employing contacts for use in electrical equipment where the acceptability of the combinations is determined by Underwriters Laboratories Inc.

Models 283-0162-XXXXX and 284-0162-XXXXX are identical to models 283-0132-02303 and 284-0132-03003, respectively, except for the model number.

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE'S USE):

* CNR - Indicates investigations to Canadian Standards Special Use Attachment Plugs, Receptacles, and Connectors C22.2, No. 182.3.

* USR – Indicates investigations to Standards for Component Connectors for Use in Data, Signal, Control and Power Applications, UL 1977.

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 should be used only where they will not interrupt the current.

2. Connector Models 283-0132-02303 and 284-0132-03003 have been investigated to the Standards for Component Connectors for Use in Data, Signal, Control and Power Applications, UL 1977, First Edition for 5 oz. PWBs for a current of 35 A with maximum temperature rise of 57°C. The PWB traces measured 25 mm long by 8 mm wide.

3. Connector Models 283-0132-02303 and 284-0132-03003 have been investigated to according to the Canadian Standard, C22.2, No. 182.3-M1987 for 5 oz. PWBs for a current of 25 A with maximum temperature rise of 29°C. The PWB traces measured 25 mm long by 8 mm wide.

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

5. The acceptability of the grounding connection shall be determined by the end product engineer.

6. 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.

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

8. 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 120°C **except for model number 2204795-x.**

8A. For model number 2204795-x, thickness is less than the minimum Recognized material thickness, as such no assigned Flame class. UL 746C 12mm Flammability test conducted at 0.5 mm thickness, black color for specific insulation material.

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Current-Carrying Capability and Current Ratings

9. These devices have been subjected to the Temperature test with the rated currents and maximum temperature rise values 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.

Series Mini Crownedge	Current, A	Maximum Temperature °C	Maximum Temperature Rise, °C
1766355-x	35A	87.3°C	--
2204795-x	25	46.3	-
	2	46.9	-

Spacings and Voltage Ratings

10. Model No. 1766355-x may be used at potentials not exceeding 250 V based on Dielectric Voltage-Withstand testing conducted at 1500 Vac.