Underwriters Laboratories Inc.®

1285 Walt Whitman Road Melville, New York 11747-3081 (516) 271-6200 FAX No. (516) 271-8259/8260 http://www.ul.com



File E60980 Project 88ME13224

July 5, 1988

REPORT

on

COMPONENT - RECEPTACLES FOR ATTACHMENT PLUGS AND PLUGS

Thomas & Betts Corp. Raritan, NJ

Copyright © 1988 Underwriters Laboratories Inc.

Underwriters Laboratories Inc. authorizes the above-named company to reproduce this Report provided it is reproduced in its entirety.

Underwriters Laboratories Inc. authorizes the above-named company to reproduce that portion of this Report consisting of this Cover Page through Page 3.

File E60980	Vol. 1	Sec. 18	Page 1	Issued:	1988-07-05
	Vol. 5	Sec. 4		Revised:	2010-12-11
		and Report			

DESCRIPTION

PRODUCT COVERED:

Component - Connectors -

Compliant Connector Headers, Series 609 or 612.

Edge Mount Headers, Series S10012.

Low Profile Header Connectors, Cat. Nos. 609, 612, 636, S10053, **17616XX** and **17617XX**. Cat. Nos. 609-1407G15, -2007G15; P22-162411, -162412 through -162414, -42441407, -42441427, -42443407T20, -42443427, -42443427T20, -42444007, -42444007T11, -42444027, -42444027T11, -4244507, -42445027; P23-184201, -184202, -189201 through -189208.

Low Profile Header Connectors (with compliant pins) Series 609.

Male Connectors, Series 609. Cat. Nos. 609-XX66, P51-155103.

Male Headers, Series 500, 501, 609, 618, P28, **17617XX** and **1888XXX**. Cat. Nos. 500-YYX7X0X, with or without suffixes C, E, ES, 50G12; AP22116701; AP22116702; P22-141701, -1461, -42444027, -42442007, -42441407, -42441027, -42442027, -42443427, -42444027A, -42445027, -42443427R15, -42445027R15; P27-1511, -152201, -152202, -152203; -161701, -202701, -232301, -238901; P28-167701, -167702, -167703, -167706.

The above connectors may be provided with or without three character suffixes.

WW - Denotes 00 through 80 XX - Denotes 10 through 64

Series 17616XX, 17617XX, 1888XXX may contain prefix "X-" and/or suffix "-X" (X = 0 through 9) as shown, which represents number of positions and/or color of plastic (blue or black); or represents the finish on the mating surface of the post. For example, model number 2-1761606-5.

File E60980	Vol. 1	Sec. 18	Page 2	Issued:	1988-07-05
	Vol. 5	Sec. 4		Revised:	2008-09-15
		and Report			

GENERAL:

These devices are multi-pole connectors employing contacts of the insulation displacement termination type for use with flexible flat cable to printed circuit boards.

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

 $\underline{\text{Use}}$ - For use only in complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

<u>Conditions of Acceptability</u> - 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. The following devices have been investigated for current-carrying capability, carried by each pole with a max temperature rise, as noted below. Other devices shall be judged in the end-use product for current-carrying capability.

Device	Wire (AWG)	Current (Amps)	Max Temp. <u>Rise</u>
Wrap Post Socket Connectors	No. 28 Sol.	1 A	13°C
Wrap Post Socket Connectors	No. 28 Str.	1 A	11°C
Wrap Post Socket Connectors	No. 30 Sol.	1 A	16°C

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

4. 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.

* 5. Nonadjacent poles may be used at potentials not exceeding 250 V provided that the spacings requirements of Paragraph **11.1** of UL **1977**. Dielectric testing has not been performed.

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

7. The electrical and mechanical contact between the connector and the ribbon cable is to be judged in the end-use equipment.

File E60980	Vol. 1	Sec. 18	Page 3	Issued:	1988-07-05
	Vol. 5	Sec. 4		Revised:	2006-11-29
		and Report			

8. The suitability of the insulating materials used in the molded bodies shall be judged in the end-use equipment.

9. The operating temperature of these devices should not exceed the temperature ratings of the insulating materials. These materials may be used interchangeably at a max temperature of 125° C.