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PRODUCT COVERED:

Component Connectors - M-Series.

GENERAL:

These devices are multi-pole combination attachment plugs, receptacles with pin/sockets for standard loading and reverse loaded (pins in socket housings, sockets in pin housings), intended to be factory assembled

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 as 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. These devices have not been tested for current-carrying capability.
- 3. The suitability of the mounting means shall be determined in the end use.
- 4. The acceptability of the grounding connection shall be determined by the end product use engineer.
- 5. The electrical and mechanical suitability of the wiring terminals shall be determined in the end use. Conductor secureness has not been performed, except as noted in Condition of Acceptability No. 14.

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- 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 adjacent poles may be used at potentials not exceeding 250 V based on the spacings requirements of Paragraph 12.1 of UL 498 Eleventh Edition.
- 8. Nonadjacent poles may be used at potentials not exceeding 600 V provided that the spacings requirements of Paragraph 12.1 of UL 498 Eleventh Edition.
- 9. The plug pins and receptacle contacts, except as noted in Condition of Acceptability No. 14, are for assembly on No. 10 to 32 AWG inclusive, stranded copper wire leads by crimping, clip-on, and post type termination. Plug pins may be solder type for Printed Circuit Board termination.
- 10. The suitability of the insulating materials used in the molded bodies shall be judged in the end-use equipment.
- 11. 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 $105\,^{\circ}\text{C}$.
- 12. Optional accessories such as: center fasteners, hardware, kits, etc. has not been evaluated and should be judged in the end-use application.
- 13. The electrical and mechanical suitability between the connector and the printed circuit board is to be judged in the end-use.
- 14. The factory assembled contact PNs 1-66360-4, 1-66360-5, 1-66358-0, 1-66358-9, 1-66361-4, 1-66361-5, 1-66359-6, 1-66359-7, as shown in Ills. 1 and 2 respectively, have been investigated for a wire range of Nos. 14 18 AWG, at a tensile force of 20 lbs.
- 15. The factory assembled contact PNs 1-66360-4, 1-66360-5, 1-66358-0, 1-66358-9, 1-66361-4, 1-66361-5, 1-66359-6, 1-66359-7, as shown in Ills. 1 and 2 respectively, 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.

Loading	DC Current (A)	Max. Temp. Rise	Ambient Temp. (°C)
Single circuit	24	24.4	26.3
50% energized	7	21.8	26.4
100% energized	6	21.1	26.0