File E28476 Project 97ME17936

October 27, 1997

REPORT

on

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

> AMP Incorporated Harrisburg, PA

Copyright © 1997 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 2.

File E28476	Vol. 9	Sec. 7	Page 1	Issued:	1997-10-27
		and Report		Revised:	2015-09-09

DESCRIPTION

PRODUCT COVERED:

Component - USR, CNR Series AMP MONO-SHAPE Connectors.

GENERAL:

These devices are multi-pole connectors intended for factory assembly on printed wiring boards where the acceptability of combinations is determined by UL LLC. The above series may be identified as follows:

Туре	Wire Size (AWG- str)	Rating	<u>Ill.</u>
Tab Connector	20	3 A, 380 V ac	1
	14	14 A, 380 V ac	
Single Way	20	3 A, 380 V ac	1
Tab Connector	14	16 A, 380 V ac	
PCB Connector	20	3 A, 380 V ac	2
	18	6 A, 380 V ac	
Satellite Conn.	20	3 A, 380 V ac	3
	14	16 A, 380 V ac	
Tab Connector (MKII)	16	16 A, 240 V ac	4
	18	10 A, 240 V ac	
	20	3 A, 240 V ac	
PCB Connector (MKII)	18	10 A, 240 V ac	5
	20	3 A, 240 V ac	

Tab Connector (MONO-SHAPE)	20	6 A, 240 V ac	6
PCB Connector (MONO-SHAPE)	20	6 A, 240 V ac	6

* USR - Indicates investigation to United States Standard, UL 1977.

CNR - Indicates investigation to Canadian National Standard, C22.2 No. 182.3 - M1987.

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

Use - For use only in 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

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

File E28476	Vol. 9	Sec. 7	Page 2	Issued:	1997-10-27
		and Report		Revised:	2015-09-09

- 2. These devices have been investigated for the current ratings indicated above with the maximum temperature rises not exceeding 30°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. The electrical and mechanical contact between the connector and the printed circuit board is to be judged in the end-use equipment.
- 6. The suitability of the insulating materials used in the molded bodies shall be judged in the end-use equipment.
- 7. 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.

8. The following 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:

		Maximum Temperature °C		
Series	Current, A	Rise	Recorded Temperature	
MONO-SHAPE Tab Connector	6	20.8	45.4	
MONO-SHAPE PCB Connector	6	14.5	39.5	

9. 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.

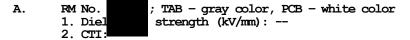
Cat. No.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, ⁰ C
MONO-SHAPE Tab and PCB Connector	A	0.4 mm	(+)	(++)	(++)	65 (++)	65

Note:

(#) - Code for Insulating Body Material.

(+): Thickness is less than the minimum Recognized material thickness, as such no assigned Flame class. UL 746C 12mm Flammability test conducted.

(++): These PLCs are based on the minimum Recognized material thickness.



Mating Connectors

10. 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.