

File E28476  
Project 13ME06230

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REPORT

On

COMPONENT - Connectors for Use in Data, Signal, Control and Power Applications

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## DESCRIPTION

## PRODUCT COVERED:

USR, CNR Component Connector - Cluster Block 3P Clip HSG.

## GENERAL:

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

USR indicates investigation to United States Standards, UL 1977.

CNR indicates investigation to Canadian National Standards, C22.2 No. 182.3.

## RATINGS:

Series	Voltage Vac/Vdc	Ampere (A)	Conductor Sizes, AWG Str
Cluster Block 3P Clip HSG	300	10	16
		7	18
		5	20

Disconnecting Use - see Sec Gen for required marking

## TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC.

Conditions of Acceptability - The following are among the considerations to be made when evaluating the device in the end-use product.

## Interruption of Current

1. These devices are not suitable for interrupting the flow of current by connecting or disconnecting the mating connector.

## Current-Carrying Capability and Current Ratings

2. These devices have been subjected to the Temperature test with the rated currents and maximum temperature, maximum temperature rise values tabulated below.

Cat. No.	Current , A	Wire size (AWG)	Maximum Temperature , °C	Maximum Temperature Rise, °C	Represent
1-2005820-1	10	16	49.6	24.6	2005820-1, 2- <b>2005820-9, 3- 2005820-9</b>
	7	18	40.2	15.2	
	5	20	35.3	10.3	

## Insulating Materials

3. These 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.

Series	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, °C
1-2005820-1, 2005820-1	A	0.9 mm	V-0	3	0	130	105
<b>2-2005820-9, 3- 2005820-9</b>	B	0.9 mm	V-0	1	0	130	105

(#) - Code for Insulating Body Material.

- A. Tyco Raw Material # 1573755**  
 1. Dielectric strength (kV/mm): 27  
 2. CTI: 3
- B. Tyco Raw Material # 2136389-1**  
 1. Dielectric strength (kV/mm): -  
 2. CTI: 0

## Terminations

4. Crimp contacts of Series Cluster Block 3P Clip HSG are intended for crimp termination on stranded copper conductor using the tooling shown in Ill. 3 for information purpose only.

	Wire Size (AWG)
Cluster Block 3P Clip HSG	16
	18
	20

## Mating Connectors

5. These devices have been assessed with the mating connectors as tabulated below.

Series	Mating Connector Cat No.	Mating Connector Manufacturer
Cluster Block 3P Clip HSG	K2578	Qingdao Kwangyang Electronics Co., Ltd

## Miscellaneous

6. The enclosure of the device has live parts that may be exposed to user contact when the connector is energized. The device is suitable for use only within an acceptable enclosure.