# CERTIFICATE OF COMPLIANCE

Certificate Number 20150917-E28476

Report Reference E28476-20150917

Issue Date 2015-SEPTEMBER-17

Issued to: TYCO ELECTRONICS CORP

2901 FULLING MILL RD

**MIDDLETOWN PA 17057-3170** 

This is to certify that representative samples of

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

Series HG-Q.4/2, HG-Q.8

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 746C Polymeric Materials - Use in Electrical

**Equipment Evaluations:** 

UL 1977, Component Connectors for Use in Data, Signal,

Control and Power Applications;

CAN/CSA C22.2 No. 182.3- Special Use Attachment Plugs,

Receptacles and Connectors

Additional Information: See the UL Online Certifications Directory at

www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC

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File E28476 Project 4786982382

September 17, 2015

REPORT

on

 $\begin{array}{c} {\tt COMPONENT - Connectors \ for \ Use \ in \ Data, \ Signal, \ Control \ and \ Power} \\ & {\tt Applications} \end{array}$ 

Tyco Electronics Corp Middletown, PA

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DESCRIPTION

## PRODUCT COVERED:

USR, CNR Component Connector, Series HG-Q.4/2, HG-Q.8

## GENERAL:

These devices are multi-pole connectors intended for factory assembly on copper wire sizes as indicated in Ratings table below 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:

Cat. No.	Contact Cat. No.	Voltage [Vac/Vdc]	Ampere (A)	Conductor Sizes, Cu - Str
Series HG-Q.4/2:				
1103095	5-1108757-1	600	40	8 AWG
	5-1105050-1	250	10	14 AWG
1103096	5-1108756-1	600	40	8 AWG
	5-1105051-1	250	10	14 AWG
Series HG-Q.8:				
1103070	5-1105100-1	500	16	12 AWG
1103071	5-1105101-1	500	16	12 AWG

Disconnecting Use - see Sec Gen for required marking

Connector Descriptive Table:

Connector Part No.	Description	Contacts	Uses Contact Part Number	Ratings
1103095	Male Insert Assembly HG-Q.4/2.STi.C:  • 1245334-1 / insert / Outer Wall (OW): 0.8mm Between Adjacent Poles(AP):1.134 mm	4+2+earthing	5x Pin Contact 5-1108757-1, HSK 2x Pin Contact 5-1105050-1, HN.D	4x600V/40A & 2x250V/10A
1103096	Female Insert Assembly HG- Q.4/2.STi.C.Bu:  • 1245335-1 / insert / (OW - 0.7mm/AP -1.9mm)	4+2+earthing	5x Socket Contact 5- 1108756-1, HSK 2x Socket Contact 5- 1105051-1, HN.D	4x600V/40A & 2x250V/10A
1103070	Male Insert Assembly HG-Q.8.Sti.C:	8+earthing	9x Pin Contact 5-1105100-1, HE/HA	8x500V/16A
1103071	Female Insert Assembly HG-Q.8.Bu.C:	8+earthing	9x Socket Contact 5- 1105101-1, HE/HA	8x500V/16A

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Electrical Terminal and Tooling Correlation Table:

			TE crimp tooling employed for dedicated terminal				
		Terminal PN	Wire size AWG		Die in Combination	Extraction tool HSK	Insertion tool
Crimp contacts HSK series 40 A	1108757	5-1108757- 1	8	1-1105850-8	2-1105870-8	0-1102855-8	0-1102855- 6
	1108756	5-1108756- 1	8	1-1105850-8	2-1105870-8	0-1102855-8	0-1102855- 6
contacts HN.D	1105050	5-1105050- 1	14	1-1105850-8	1-1105852-8	0-1102855-2	0-1102855- 6
	1105051	5-1105051- 1	14	1-1105850-8	1-1105852-8	0-1102855-2	0-1102855-
Crimp contacts HE/HA series 16 A	1105100	5-1105100- 1	12	1-1105850-8	1-1105852-8	0-1102855-3	0-1102855- 6
	1105101	5- 1105101-1	12	1-1105850-8	1-1105852-8	0-1102855-	0- 1102855-6

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# 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 rise and recorded temperature (adjusted to  $25\,^{\circ}$ C ambient) values tabulated below:

	Contact PN/		Maximum Temperature		perature '	°C		
Cat. No.	Wire	Size	Contac Curre	*	Contact PN/ Rise		Contact PN/ Recorded Temperature	
1103095	5- 1108757 -1/ 8AWG	5- 1105050 -1/ 14 AWG		5- 1105050 -1/10A	5- 1108757- 1/29.4	5- 1105050 -1/27.2	5- 1108757- 1/54.4	5- 1105050 -1/52.2
1103096	5- 1108756 -1/ 8 AWG	5- 1105051 -1/ 14AWG	5- 1108756- 1/40A	5- 1105051 -1/10A	5- 1108756- 1/29.4	5- 1105051 -1/26.5	5- 1108756- 1/54.4	5- 1105051 -1/51.5
1103070	5- 110510 0-1/ 12 AWG		5- 1105100 -1/16A		5- 1105100 -1/21.5		5- 1105100 -1/46.5	
1103071	5- 110510 1-1/ 12 AWG		5- 1105101 -1/16A		5- 1105101 -1/21.3		5- 1105101 -1/46.3	