

CERTIFICATE OF COMPLIANCE

Certificate Number 20180420-E28476
Report Reference E28476-20150829
Issue Date 2018-APRIL-20

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
Refer to Addendum page for Models/Product

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: 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

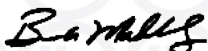
Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

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

The UL Recognized Component Mark generally consists of the manufacturer's identification and catalog
number, model number or other product designation as specified under "Marking" for the particular
Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products
that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark:
, may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is
required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual
recognitions.

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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contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

USR, CNR Component Connector,

Cat. No. HDC, followed by -HE, followed by -006, -010, -016, -024, -032, -048, followed by M, F, MSS or FSS.

Cat. No. HDC, followed by -HE, followed by -016, followed by M, F, MSS or FSS, followed by 17-32.

Cat. No. HDC, followed by -HE, followed by -024, followed by M, F, MSS or FSS, followed by 25-48.

Cat. No. HDC, followed by -HES or -HEC, followed by -006, -010, -016, -024, -032 or -048, followed by M or F.

Cat. No. HDC, followed by -HE, followed by -010, followed by MSK or FSK.

Cat. No. HDC, followed by -HE, followed by -006, 010, 016, 024, followed by MS, FS, MC, FC.

Cat. No. HDC, followed by -HE, followed by -016, followed by MS, FS, MC, FC, followed by 17-32.

Cat. No. HDC, followed by -HE, followed by -024, followed by MS, FS, MC, FC, followed by 25-48.

Cat. No. HDC, followed by -HVE, -HVES or -HVEC, followed by -003, -006, -010, followed by M or F.

*Cat. No. HDC, followed by -HEE, followed by -010, -018, -032, -046, -064, -092, followed by M or F.

Cat. No. HDC, followed by -HEE, followed by -032, followed by M or F, followed by 33-64.

Cat. No. HDC, followed by -HEE, followed by -046, followed by M or F, followed by 47-92.

Cat. No. HEEE, followed by -020, -032, -040, -048, -064, -072, -080, -096, -128, -144, followed by -M or -F.

Cat. No. HEEE, followed by -040, followed by -M or -F, followed by 41-80.

Cat. No. HEEE, followed by -048, followed by -M or -F, followed by 49-96.

Cat. No. HEEE, followed by -064, followed by -M or -F, followed by 65-128.

Cat. No. HEEE, followed by -072, followed by -M or -F, followed by 73-144.

Cat. No. HDC, followed by -HEAV, followed by -006, -010, -016, -024, followed by M, F, MS, FS.



Bruce Mahrenholz, Director North American Certification Program
UL LLC

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