



# Certificate of Compliance

**Certificate:** 1030930

**Master Contract:** 164196 (LR 7189)

**Project:** 80018100

**Date Issued:** 2019-10-03

**Issued To:** TE Connectivity Corporation  
2901 Fulling Mill Road  
Middletown, Pennsylvania, 17057-3163  
United States

**Attention:** Larry Hall

*The products listed below are eligible to bear the CSA Mark shown*



*Michael Chung*  
**Issued by:** Michael Chung

## **PRODUCTS**

**CLASS 6233 01 - RECEPTACLES Attachment Plug Type and Plugs**

Special-use connectors "COMMERCIAL MATE-N-LOK" Series 350XXX, 380XXX, 770000, 829XXX, 15865XX, 2178XXX, rated 13A (15-pole, No 14 AWG), 6.5A (15-pole, No 20 AWG), 7A max, 600V max.

Special-use connectors "MATE-N-LOK or UNIVERSAL MATE-N-LOK" Series 60XXX, 61XXX, 350XXX, 380XXX, 480XXX, 640XXX, 641XXX, 643XXX, 770XXX, 794XXX, 829XXX, 926XXX, 927XXX, 969XXX, 1241XXX, 1586XXX, 1644XXX, 1703XXX, 1863XXX, 1877XXX, 1950XXX, 2029XXX, 1969XXX, Cat Nos 966519-3, 2312156, 2312157, 2825081-1, rated 13A (15-pole, No 14 AWG), 6.5A (15-pole, No 20 AWG), 7A max, 600V max.

Special-use connectors "UNIVERSAL MATE-N-LOK" Series 794XXX, rated 26A (4-pole, No 10 AWG), 23A (4-pole, No 12 AWG), 22A (6-pole, No 10 AWG), 20A (6-pole, No 12 AWG), 7A max, 600V max.

Special-use connectors "UNIVERSAL MATE-N-LOK" Series 1604XXX, rated 15A (No 10 AWG), 600V max.

Special-use connectors "UNIVERSAL MATE-N-LOK II" Cat Nos 193839, 194002, 194009, 194010, 194012, 194013, 194014, 194017, 194018, 194234, 194260, 194261, 194269, 350945, 796961, rated 22A max, 600V and Series 770XXX, rated 7A max, 600V max.

Special-use connectors "UNIVERSAL MATE-N-LOK" Series 350777, 350778, rated 2.0A, 600Vac current interruption.



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**APPLICABLE REQUIREMENTS**

CSA Std. C22.2 No. 182.3-16, 2<sup>nd</sup> Ed - Special Use Attachment Plugs, Receptacles, and Connectors



## *Supplement to Certificate of Compliance*

**Certificate:** 1030930

**Master Contract:** 164196 (LR 7189)

*The products listed, including the latest revision described below,  
are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

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| <b>Project</b> | <b>Date</b> | <b>Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 80018100       | 2019-10-03  | One alternate body material.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 80011497       | 2019-08-09  | Add Cat No 770262-4 .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 000070155540   | 2017-09-15  | One alternate body material.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 000070143217   | 2017-06-20  | Add Series 350736-1, 350865-1, 350866-1, 926307-1, 770023-1, 770025-1, 770026-1, 770028-1, 770029-1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 000070143056   | 2017-06-14  | Add Series 2312156, 2312157.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 000070070692   | 2016-04-13  | Add Cat Nos 643424-3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 000070063977   | 2016-02-19  | Add Cat Nos 1586866-1, 1586869-1, 1586872-1, 1586876-1, 1586879-1, 1586889-1, 1586890-1, 1586893-1, 1586895-1, 1586896-1, 1586898-1, 1586899-1, 1586936-1, 1586937-1, 1586939-1, 1586953-1, 1586955-1, 1586958-1, 1586963-1, 1586968-1, 1586979-1, 1586984-1, 1586998-1, 1969795-1, 1969796-1, 1969797-1, 1969798-1, 1969799-1, 1969800-1, 1969801-1, 1969802-1, 1969803-1, 1969804-1, 1969805-1, 1969806-1, 1969807-1, 1969808-1, 1969809-1, 1969810-1, 1969811-1, 1969812-1, 1969813-1, 1969814-1, 1969815-1, 1969816-1, 1969817-1, 1969818-1, 1969830-1, 770262-3; one alternate body material. |
| 000070059209   | 2016-01-20  | Add Cat No 2825081-1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 000070019258   | 2015-02-10  | Add Series 926298-1, 926299-1, 926300-1, 926301-1, 926302-1, 926308-1, 926309-1, 926647-1, 969326-1. LR 7189-549, 1030930. GPS12518.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 0002692124     | 2014-01-08  | Add "UNIVERSAL MATE-N-LOK" Series 926309, 927231, 1586892, 1644055, 170306X, 186300X, 2178XXX and one alternate body material.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 0002594734     | 2013-03-12  | Add "UNIVERSAL MATE-N-LOK" Series 2178473, 2178474.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 0002496430     | 2012-02-29  | Series 794911, 794912 alternate pin and sockets.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |



|            |            |                                                                                                                                                       |
|------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0002405832 | 2011-03-09 | Add Cat Nos 2029314-1, 2029315-1 and one alternate material [REDACTED] (item 1ad).                                                                    |
| 0002266810 | 2010-01-25 | Add Series 1950041 and alternate [REDACTED] (item 1ac).                                                                                               |
| 0002248382 | 2009-12-01 | One alternate body material [REDACTED] (item 1f).                                                                                                     |
| 0002204295 | 2009-08-10 | Add Series Nos 796961.                                                                                                                                |
| 0002151147 | 2009-03-09 | Add Series 926XXX, 927231, 1241809, 1586860, 1644055, 18630XX.                                                                                        |
| 0002095339 | 2008-10-06 | Add Series 350945, 829182, 829183, 829184, 829185.                                                                                                    |
| 0002066498 | 2008-09-15 | Add Series 158684X, 158685X, 1586887, 1586952.                                                                                                        |
| 0002044513 | 2008-05-30 | Add Series 194234, 194260, 194261, 194269, 350950.                                                                                                    |
| 0002042196 | 2008-05-09 | Add Series 158635X, 202900X.                                                                                                                          |
| 0002027486 | 2008-04-04 | Delete "UNIVERSAL MATE-N-LOK" Series 1877829, 1877830, 1954495, 1954496, 1954564, 1954565, 1954566, 1954759, 1954760 (Part B).                        |
| 0001981024 | 2007-11-23 | Alternate male pin Part No 1954443 (item 2ag).                                                                                                        |
| 0001980122 | 2007-11-19 | Add Cat Nos 1703061, 1703062.                                                                                                                         |
| 0001974460 | 2007-11-12 | Add Cat No 770827.                                                                                                                                    |
| 0001935084 | 2007-09-12 | Series 350777, 350778, 1877829, 1877830, 1954495, 1954496, 1954563 to 1954566, 1954759, 1954760 rating increase to 2.0A, 600Vac current interruption. |
| 0001934852 | 2007-07-31 | Three new contacts Part Nos 350690, 350706, 640347.                                                                                                   |
| 0001915904 | 2007-05-23 | Add "UNIVERSAL MATE-N-LOK" Series 1877829, 1877830, 1954495, 1954496, 1954563, 1954564, 1954565, 1954566, 1954759, 1954760 (Part B).                  |
| 0001903128 | 2007-04-18 | Cat No 794714 alternate keyed construction.                                                                                                           |
| 0001891103 | 2007-03-09 | Add "UNIVERSAL MATE-N-LOK" Cat Nos 1586661-1, 1586662-1, 1586663-1, 1586664-1, 1586665-1, 1586668-1, 1586669-1.                                       |
| 0001878703 | 2007-02-09 | Add "MATE-N-LOK" Cat Nos 794116, 794117, 794118, 794412, 794413.                                                                                      |
| 0001875833 | 2007-01-29 | Series 350777, 350778 two alternate contacts Part Nos 350699, 350851.                                                                                 |
| 0001873542 | 2007-01-19 | Alternate body material [REDACTED] (item 1ab).                                                                                                        |



|            |            |                                                                                                                      |
|------------|------------|----------------------------------------------------------------------------------------------------------------------|
| 0001837933 | 2006-10-16 | Two alternate body materials [REDACTED] (items 1z, 1aa).                                                             |
| 0001813775 | 2006-08-14 | Add "Commercial Mate-N-Lok" Series 15865XX.                                                                          |
| 0001790186 | 2006-06-28 | Series 350777, 350778 add a 1.35A, 480Vac current interruption rating.                                               |
| 0001791643 | 2006-06-02 | Add Cat No 1877788.                                                                                                  |
| 0001789509 | 2006-05-02 | Add Cat No 1586719 and alternate body material [REDACTED] (item 1y).                                                 |
| 0001762049 | 2006-02-20 | Alternate body material (item 1x).                                                                                   |
| 0001696192 | 2005-07-29 | Add connectors Cat Nos 1604210, 1604254, 1604256, 1604941 and alternate body material (item 1u).                     |
| 0001600823 | 2005-03-14 | Add 82 Header Cat Nos to Series "UNIVERSAL MATE-N-LOK" and add alternate body material [REDACTED] (item 1v, Part A). |
| 0001562276 | 2004-06-10 | Add "UNIVERSAL MATE-N-LOK" Cat Nos 1586377-1, 1586378-1, 1586379-1, 1586380-1, 1586436-1, 1586437-1                  |
| 0001545501 | 2004-05-05 | Add Cat No 794715-3.                                                                                                 |
| 0001537696 | 2004-04-05 | Alternate male pin Part No 1586096 (item 2g).                                                                        |
| 0001532538 | 2004-03-09 | Alternate body material (item 1u) and add Cat No 794716-3.                                                           |
| 0001399793 | 2003-01-15 | Increase current rating of "MATE-N-LOK or UNIVERSAL MATE-N-LOK" to 13A max.                                          |



# Descriptive Report and Test Results

**MASTER CONTRACT:** 164196

**REPORT:** 1030930

**PROJECT:** 80018100

**Edition 1:** August 25, 1994; Application No LR 7189-549 - Toronto  
Issued by V.O. Roslin, P. Eng.

**Edition 11:** November 30, 1999; Project 1030930 - Toronto  
Issued by B. Wright, Technologist

Report Reissued

Figure Replaced: Fig 1

Figure Added: Fig 383

**Edition 70:** September 15, 2017; Project 70155540 - Toronto  
Issued by Michael Chung

Report Reissued

**Edition 71:** October 24, 2017; Project 70156162 - Toronto  
Issued by Mike W. Gryschuk, C.E.T.

Report Reissued

Figures Added: Fig 455

**Edition 72:** August 9, 2019; Project 80011497 - Toronto  
Issued by Minoru Morimoto, C.E.T.

Report Reissued

Figures Added: Fig 456

**Edition 73:** October 3, 2019; Project 80018100 - Toronto  
Issued by Michael Chung

Report Reissued

Contents: Certificate of Compliance - Pages 1 to 2  
Supplement to Certificate of Compliance - Pages 1 to 3  
Description and Tests - Pages 1 to 26  
Figures - Figs 1 to 456 (electronically on file)  
Appendices - Appendix A (1 page - Main Files)

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## **PRODUCTS**

### CLASS 6233 01 - RECEPTACLES - Attachment Plug Type and Plugs

Special-use connectors "COMMERCIAL MATE-N-LOK" Series 350XXX, 380XXX, 770000, 829XXX, 15865XX, 2178XXX, rated 13A (15-pole, No 14 AWG), 6.5A (15-pole, No 20 AWG), 7A max, 600V max.

Special-use connectors "MATE-N-LOK or UNIVERSAL MATE-N-LOK" Series 60XXX, 61XXX, 350XXX, 380XXX, 480XXX, 640XXX, 641XXX, 643XXX, 770XXX, 794XXX, 829XXX, 926XXX, 927XXX, 969XXX, 1241XXX, 1586XXX, 1644XXX, 1703XXX, 1863XXX, 1877XXX, 1950XXX, 2029XXX, 1969XXX, Cat Nos 966519-3, 2312156, 2312157, 2825081-1, rated 13A (15-pole, No 14 AWG), 6.5A (15-pole, No 20 AWG), 7A max, 600V max.

Special-use connectors "UNIVERSAL MATE-N-LOK" Series 794XXX, rated 26A (4-pole, No 10 AWG), 23A (4-pole, No 12 AWG), 22A (6-pole, No 10 AWG), 20A (6-pole, No 12 AWG), 7A max, 600V max.

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Special-use connectors "UNIVERSAL MATE-N-LOK II" Cat Nos 193839, 194002, 194009, 194010, 194012, 194013, 194014, 194017, 194018, 194234, 194260, 194261, 194269, 350945, 796961, rated 22A max, 600V and Series 770XXX, rated 7A max, 600V max.

Special-use connectors "UNIVERSAL MATE-N-LOK" Series 350777, 350778, rated 2.0A, 600Vac current interruption.

## **APPLICABLE REQUIREMENTS**

CSA Std. C22.2 No. 182.3-16, 1<sup>st</sup> Ed - Special Use Attachment Plugs, Receptacles, and Connectors

## **MARKINGS**

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown without an indicator for Canada only (indicating that products have been manufactured to the requirements of Canadian Standards).

The Submitter's name ("TYCO")/tradename ("AMP")/trademark/file ("164196" or "LR 7189") and the CSA Mark are permanently ink-stamped, labeled, etc on each device.

The Submitter's identification, the CSA Mark, the Cat No, the electrical rating and per the note below the following (or equivalent) statements: CAUTION: NOT FOR INTERRUPTING CURRENT" and "ATTENTION: NE PAS UTILISER POUR COUPER LE COURANT" are permanently marked on each device or in or on the smallest unit container or carton.

Series 350777, 350778 connectors have a 2.0A, 600Vac current interruption rating, therefore do not require the cautionary not for interrupting current markings and may be also marked "CURRENT INTERRUPTION" (or equivalent) on each device or smallest carton (if desired).

The current and voltage may be marked at a lower value than the rated value.

## **ALTERATIONS**

See "Markings" above.

## **FACTORY TESTS**

None.

## **SPECIAL INSTRUCTIONS FOR FIELD SERVICES**

1. Component descriptions marked with either the "(INT)" or "(INT\*)" identifiers may be substituted with other components providing the requirements specified under the notes in the "Description" are complied with (reference only).

## **COMPONENT SPECIAL PICKUP**

1. Component descriptions marked with the identifier "(CT)" are subject to annual pickup and Conformity Testing (reference only).

## **DESCRIPTION**

### Notes:

1. Component Substitution (reference only)
  - a) Critical components (those identified by mfr name, cat no), which are NOT identified with either "INT" or "INT\*" are not eligible for substitution without evaluation and report updating
  - b) The term "INT" means a "Certified" and/or "Listed" (or a "Recognized" and/or "Accepted") component may be replaced by one "Certified" and/or "Listed" by another certification organization accredited by the appropriate accreditation body or scheme requirements to the correct standard, for the same application; providing the applicable country identifiers are included and requirements in item "d" below are complied with.
  - c) The Term "(INT\*)" means a "Recognized" and/or "Accepted" component may be replaced by a component that is CSA Certified. The applicable country identifiers shall be included, the requirements in item "d" below as well as any "conditions of suitability" for the component (as recorded in this descriptive report) shall be complied with;
  - d) Components which have been substituted, must be of an equivalent rating, configuration (size, orientation, mounting) and the applicable minimum creepage and clearance distances are to be maintained from live parts to bonded metal parts and secondary parts.
  - e) Substitution of a "Certified" and/or "Listed" component with a component that is "Recognized" or "Accepted" is not permitted without evaluation and report updating.
  - f) Substitution of a "Recognized" and/or "Accepted" component by one that is not CSA Certified is not permitted without a proper evaluation as well as a report update because the Conditions of Acceptance of the original component may be different than the Conditions of Acceptance of the substitute component.

### Conditions of Acceptability:

1. Supplied only to manufacturers, as components, for the assembly of Certified electrical equipment, where the acceptability of the suitability of the combination in the end use is determined by CSA International.
2. Not for interrupting current, except for Series 350777, 350778 rated 2.0A, 600Vac.
3. Prefixes and suffixes maybe added to denote non-electrical variations.
4. Connectors using pins P/N 193841 and sockets P/N 193842 are de-rated to 16A max.
5. "Mate-N-Lok II, Commercial Mate-N-Lok and Universal Mate-N-Lok" have a min 6.35mm pitch.
6. "UNIVERSAL MATE-N-LOK" connectors for Current Interruption (Part B) only use body materials:  
[REDACTED] (item 1y), [REDACTED] (item 1ai)

Note: This Report supersedes Reports LR 7189-493, LR 7189-381 and LR 7189-77 (Sub-Report LR 16455-98).