

# **Certificate of Compliance**

**Certificate:** 1212210 (LR 7189-308)

**Project:** 1731057

Master Contract: 164196

Date Issued:

November 9, 2005

Issued to:

Tyco Electronics Corporation 2100 Paxton St Harrisburg, PA 17111 USA Attention: Mr. Cal Reed

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: Mike W. Gryschuk, C.E.T.

Authorized Nick Alfano, Operations Manager by:



#### **PRODUCTS**

CLASS 6233 01 - RECEPTACLES - Attachment Plug Type and Plugs
CLASS 6233 81 - RECEPTACLES - Attachment Plug Type and Plugs - Certified to US Standards

S-use connectors Series MTA-100, rated 5A, 250V; and Series MTA-156, rated 7A, 600V.

#### APPLICABLE REQUIREMENTS

CSA Std C22.2 No. 182.3-M1987 - Special Use Attachment Plugs, Receptacles, and Connectors

ANSI/UL Std No. 1977 - Component Connectors for Use in Data, Signal, Control and Power Applications



# Supplement to Certificate of Compliance

Certificate: 1212210

Master Contract: 164196

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

## **Product Certification History**

Project	Date	Description
1731057 1709266 1572467	Nov 9, 2005 Sep 6, 2005 Jul 26, 2004 Oct 0, 2002	One alternate body material (item 1t). One alternate body material (item 1s). Add alternate body material 5010GN1-15 (50% Max Regrind), see (Item 1r).
1369489 History	Oct 9, 2002	One alternate body material (items 1a)
1212210	2001/06/01	Two alternate body materials (items 1h, 1i).
-994	1999/05/06	Increase the voltage rating of Series MTA-156 to 600V.
-735	1996/01/22	Add Series MTA-156.
-308	1991/09/18	Original Certification, Series MTA-100.



# Descriptive and Test Report

### MASTER CONTRACT: 164196 REPORT: 1212210 PROJECT: 1731057

Edition 1:	September 18, 1991; Application No LR 7189-308 - Toronto
	Issued by Mike W. Gryschuk, C.E.T.; Reviewed by V.O. Roslin, P. Eng.

Edition 4: June 1, 2001; Project 1212210 - Toronto Issued by Mike W. Gryschuk, C.E.T.

Report Re-Issued

Edition 7: September 6, 2005; Project 1709266 - Toronto Issued by Mike W. Gryschuk, C.E.T.

Report Re-Issued

Edition 8: November 9, 2005; Project 1731057 - Toronto Issued by Mike W. Gryschuk, C.E.T.

Report Re-Issued

Contents: Certificate of Compliance – Pages 1 to 1 Supplement to Certificate of Compliance – Pages 1 to 1 Description and Tests – Pages 1 to 4 Figures – Figs 1 to 7 Literature – Pages 1-1 to 1-7

#### **PRODUCTS**

CLASS 6233 01 - RECEPTACLES - Attachment Plug Type and Plugs CLASS 6233 81 - RECEPTACLES - Attachment Plug Type and Plugs - CERTIFIED TO U.S. STANDARDS

S-use connectors Series MTA-100, rated 5A, 250V; and Series MTA-156, rated 7A, 600V.

#### **APPLICABLE REQUIREMENTS**

CSA Std C22.2 No.	182.3-M1987	-	Special Use Attachment Plugs, Receptacles, and Connectors
ANSI/UL Std No.	1977, First Ed. 1995	-	Component Connectors for Use in Data, Signal, Control and Power
			Applications

The report shall not be reproduced, except in full, without the approval of CSA International.

178 Rexdale Boulevard, Toronto, ON, Canada M9W 1R3 Telephone: 416.747.4000 1.800.463.6727 Fax: 416.747.4149 www.csa-international.org

#### MARKINGS

The Submittor's name/tradename/trademark (eg "AMP" or "Tyco"), the CSA Mark and the Cat No (if desired) are permanently marked on each device.

On or included in the smallest packaging unit:

- 1. Submittor's name/tradename/trademark (eg "AMP" or "Tyco").
- 2. CSA Mark.
- 3. Cat No.
- 4. Electrical rating in volts and amperes.
- 5. The following (or equivalent) statements: "CAUTION: NOT FOR INTERRUPTING CURRENT" and "ATTENTION: NE PAS UTILISER POUR COUPER LE COURANT".
- 6. "MTA Connectors".

#### **ALTERATIONS**

See "Markings" above.

#### FACTORY TESTS

None.

#### **DESCRIPTION**

Conditions of Acceptability:

- 1. Supplied only to manufacturers, as components, for assembly into 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.

Project 1731057: One alternate body material (item 1t).

Project 1709266: One alternate body material (item 1s).

Project 1572467: One alternate body material (item 1r).

Project 1369489: One alternate body material (item 1a).

Project 1212210: Two alternate body materials (items 1h, 1i).

<u>APP LR 7189-994C</u>: Increase the voltage rating of Series MTA-156 to 600V.

APP LR 7189-735: Add Series MTA-156 shrouded header, see Literature page 1-7.

#### APP LR 7189-308: Series MTA-100, 8-pole, dual row, right angle, shrouded header.

<u>General</u>: 1. Shipped with contacts fully or partially loaded.

- 2. Available in various sizes, shapes, configurations, densities, colours and markings.
- 3. May be flat, straight, right angle, polarized, friction lock, shrouded or split back types.
- 4. Posts may be round or square, vary in length and thickness, and be straight or right angle.
- 5. Contacts may be selectively or duplex plated.
- 6. May have locks, have polarizing tabs and may be closed-end or feed through.
- 7. May have post entry holes moulded or machine closed for keying purposes.

Product Description	Literature - Page	Photo - Figure
MTA-100 Receptacles	1-1	1
MTA-100 Headers	1-2	2
MTA-156 Receptacles	1-3	3
MTA-156 Posted Connectors	1-4	4
MTA-156 Card Edge Connectors	1-4	4
MTA-156 Headers	1-5	5
MTA-156 Quad Connectors	1-6	6
MTA-156 Headers, Shrouded	1-7	7

#### Part A - Series MTA-100 and MTA-156 Connectors

1. <u>Body</u>: (Header and Receptacle) Moulded from the materials below.

a)	<u>Type</u> PA4/6	<u>UL Flame Class</u> V-0, 0.90mm	<u>UL RTI Strength</u> <u>UL CTI</u> 110°C, 0.90mm 175-249V
b)	PA66	HB, 0.71mm	85°C, 1.50mm 600V+
c)	PA66	V-2, 0.71mm	85°C, 0.71mm 600V+
d)	PA66	HB, 1.50mm	85°C, 1.50mm 600V+
e)	PA612	V-2, 0.86mm	65°C, 0.86mm 600V+
f)	PBT	V-0, 0.71mm	140°C, 0.71mm 175-249V
g)	PBT	V-0, 0.71mm	140°C, 0.71mm 175-249V
h)	PBT	V-0, 0.89mm	140°C, 0.89mm 175-249V
i)	PA6/66	V-0, 0.41mm	110°C, 0.71mm 600V+
j)	PA66/6	V-0, 0.38mm	95°C, 0.75mm 600V+
k)	PA66	V-2, 0.71mm	85°C, 0.71mm 600V+
1)	PA66	V-2, 0.71mm	85°C, 0.71mm 600V+
m)	PA66	V-2, 0.71mm	85°C, 0.71mm 600V+
n)	PA66	V-2, 1.50mm	85°C, 1.50mm n/a
o)	PA66	V-2, 0.71mm	85°C, 0.71mm 600V+
p)	PA66	V-2, 0.71mm	85°C, 1.50mm 600V+
<b>q</b> )	LCP	V-0, 0.85mm	220°C, 0.85mm 100-174V
r)	PBT	V-0, 0.71mm	130°C, 0.71mm 175-249V
s)	PBT	V-0, 0.75mm	130°C, 0.75mm 250-399V
t)	PA66/6	V-2, 0.38mm	85°C, 0.75mm 600V+

2. <u>Contacts</u>: Copper alloy, tin or gold plated.

#### TEST REPORT

APP LR 7189-308: Due to the testing done in LR 7189-77 (Sub-Report LR 16455-54), no tests were necessary.

<u>APP LR 7189-735</u>: Due to the similarities with the new MTA-156 Series Shrouded Header and the previously Certified MTA-156 Series Header, in this Report, no further tests were required.

APP LR 7189-994C: Only a satisfactory Dielectric test @ 2200Vac, 60Hz for 1 min was deemed necessary.

Project 1212210: Due to the favourable plastics characteristics of (items 1i, 1j), no tests were deemed necessary.

Project 1369489: Due to the favourable plastics characteristics of (item 1a), no tests were deemed necessary.

Project 1572467: Due to the favourable plastics characteristics of (item 1r), no tests were deemed necessary.

Project 1709266: Due to the favourable plastics characteristics of (item 1s), no tests were deemed necessary.

<u>Project 1731057</u>: Due to the favourable plastics characteristics of (item 1t) and since it was satisfactorily evaluated in Plastics Report 1014893, no tests were deemed necessary.