



# OMRON SCIENTIFIC TECHNOLOGIES INCORPORATED EC Declaration of Conformity

OMRON Scientific Technologies Incorporated (at 6550 Dumbarton Circle, Fremont, CA 94555-3605, U.S.A.), hereby declares that the following series manufactured products listed below conform with the relevant Essential Health and Safety Requirements (EHSRs) of the European Machinery Directive (2006/42/EC), with the relevant requirements of the Low Voltage Directive (2006/95/EC), and with the essential protection requirements of the Electromagnetic Compatibility (EMC) Directive (2004/108/EC).

> MC6 Mat Controller, UM Series: Safety Mats UM, UMY, UMM, UMYM, UMO, UMYO, UMMO, UMMYO (Pressure Sensitive Protective Devices to detect the presence of persons – consisting of Safety Mat Controller in conjunction with universal pressure sensitive safety mats. Not suitable for the detection of children)

The MC6 Mat Controller, UM Series: Safety Mats UM, UMY, UMM, UMYM, UMO, UMYO, UMMO, UMMYO products have been type-examined per

#### EC Type-Examination Certificate, Registration No.: 01/205/0677/09,

issued by notified body TUV Rheinland Industrie Service GmbH, Alboinstr. 56, 12103 Berlin/Germany, Certification Body for Machinery (NB No. 0035).

The following Standards were used to form the basis for the requirements and tests:

EN 1760-1:1997: + A1:2009 - Safety of Machinery - Pressure-sensitive protective devices, Part 1: General principles for the design and testing of pressure-sensitive mats and pressure-sensitive floors.

EN 62061:2005 – Safety of machinery. Functional safety of safety-related electrical, electronic and programmable electronic control systems.

EN ISO 13849-1:2008 - Safety of machinery. Safety-related parts of control systems. General principles for design

IEC 61508, Parts 1 – 7:1998 – 2000 - Functional Safety Of Electrical/Electronic/Programmable electronic Safety-Related Systems.

EN 50178:1997 - Electronic equipment for use in power installations

EN 60204-1:2006: Safety of machinery - Electrical equipment of machines, Part 1: General requirements.

ISO 13856-1:2001 - Safety of Machinery – Pressure-sensitive protective devices, Part 1: General principles for the design and testing of pressure-sensitive mats and pressure-sensitive floors.

June 6, 2011
Wor Wilwin

Martin D. Krikorian **Quality Director** 

Scientific Technologies, Inc.

Documentation Manager of the EU Office OMRON Scientific Technologies, Inc. Am Grarock 8

D-33154 Salzkotten, Germany



# ZERTIFIKAT

This certificate is valid until 2014-12-14.

# **EC Type-Examination Certificate**

Registration No.: 01/205/0677/09

Prüfgegenstand Product tested	to detect the p	sitive Protective Devices resence of persons ntroller in conjunction with sure sensitive safety mats	Zertifikats- inhaber Licence holder	OMRON Scientific Technologies Inc. 6550 Dumbarton Circle Fremont, CA 94555-3611 United States of America
Typbezeichnung Type designation	Mat controller Safety Mats	MC6 UM, UMM, UMQ, UMMQ	Hersteller Manufacturer	see licence holder
Prüfgrundlagen Codes and standards forming the basis of testing		EN 1760-1 + A1:2009 ISO 13856-1:2001 EN 62061:2005 EN ISO 13849-1:2008 IEC 61508, parts 1-7:1998 EN 50178:1997 EN 60204-1:2006	: 3-2000	
Bestimmungsgemäße Verwendung Intended application		The mat controller in combination with the safety mats complies with the requirements of the relevant standards (Cat. 3 / PL d acc. to EN ISO 13849-1, SIL CL 2 acc. to EN 62061 / IEC 61508) and can be used in applications up to Cat. 3 / PL d acc. to EN ISO 13849-1 and SIL 2 acc. to EN 62061 / IEC 61508.		
Besondere Bedingungen Specific requirements		The instructions of the associated Installation and Operating Manual shall be considered. Not suitable for the detection of children.		
		Operating Modes: Automatic Start Start Interlock Start/Restart Interlock		

It is confirmed that the product under test complies with the requirements for machines defined in Annex I of the

EC Directives 98/37/EC (valid until 2009-12-28) and 2006/42/EC (valid from 2009-12-29).

Der Prüfbericht-Nr. 968/M 123.02/09 vom 14.12.2009 ist Bestandteil dieses

Dieses Zertifikat ist nur gültig für Erzeugnisse, die mit dem Prüfgegenstand übereinstimmen. Es wird ungültig bei jeglicher Änderung der Prüfgrundlagen für den angegebenen Verwendungszweck.

The test report-no. 968/M 123.02/09 dated 2009-12-14 is an integral part of this certificate.

This certificate is valid only for products which are identical with the product tested. It becomes invalid at any change of the codes and standards forming the basis of testing for the intended application.

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Berlin, 2009-12-14

Certification body for machinery, NB 0035

Dip.-Ing. Eberhard Frejno



# **Certificate of Compliance**

**Certificate:** 1165614 (LR 90200) **Master Contract:** 156365

**Project:** 1881507 **Date Issued:** 2007/02/16

**Issued to:** OMRON Scientific Technologies Inc

6550 Dumbarton Cir Fremont, CA 94555-3611

**USA** 

Attention: Mr. Doug Barnett

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'



**Issued by:** Rob Hempstock, AScT.

**Authorized by:** Lindsay Clark, Product Group

Manager



### **PRODUCTS**

CLASS 4812 05 - SIGNAL APPLIANCES - Systems

CLASS 4812 85 - SIGNAL APPLIANCES - Systems - Certified to US Standards

PART A: Safety Mat Controller/Power Supply, Models SMC-2-120, SMC-2-230, SMC-2-24, SMC-1-24, and Pressure Sensitive Mat-Switch to be used as Floor-Level Guarding System, rated 115 V ac/100 mA, 230 V ac/50 mA, 50/60 Hz, or 24 V dc/250 mA, 6 VA.

PART B: Safety Mat Controller, Model designation MC3, DIN-rail mount, rated 24 V dc, 0.092 A, 2.2 VA max. Power consumption, suitable for use with ELV presence sensing/pressure sensitive mat.

PART C: Safety Mat Controller, Model designation MC4, wall-mount, steel enclosure, rated 100 - 240 V ac, 0.2

The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S., respectively. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. Standards.



**Certificate:** 1165614 (LR 90200) **Master Contract:** 156365

**Project:** 1881507 **Date Issued:** 2007/02/16

A, 50/60 Hz or 24 V dc, 3 W, suitable for use with ELV presence sensing/pressure sensitive mat.

PART D: Safety Mat Controller, Model designation MC6, wall-mount, steel enclosure, rated for universal input 100 V ac to 240 V ac, 20 VA, 50/60 Hz or 24 V dc, 2.0 A, suitable for use with ELV presence sensing/ pressure sensitive mat.

Notes:

PART A:

1. Numbers in the model designation SMC-X-XXX denotes the following:

First X: 1 = 35 mm Din Box.

2= Nema 12 rated steel enclosure

Second XXX: 120= 120 V ac, 230= 230 V ac, 24= 24 V dc

2. The above certification covers electrical safety only.

PARTS B, C AND D:

- 1. Safety Mat Controller model designation MC3, MC4 and MC6 are certified as components where the suitability of combination is to be determined by the end use application.
- 2. Maximum rating for relay outputs contact on safety Mat Controller Model MC4 is 250 V ac, 6 A max.
- 3. Maximum rating for relay outputs contact (K1 & K2) on safety Mat Controller Model MC6 is 250 V ac, 7 A and maximum relay output contact (K3) on safety Mat Controller Model MC6 is 120 V ac, 0.6 A.
- 4. The above certification covers electrical safety only.

# **APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No 205-M1983 (R2004) - Signal Equipment

CAN/CSA-C22.2 No 14-05 - Industrial Control Equipment

UL 508 (17th Edition) - Industrial Control Equipment



# Supplement to Certificate of Compliance

Certificate:

1165614

**Master Contract:** 

156365

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
1881507 1795923	2007/02/16 2006/05/31	Update report 1165614 to Include Company Name Change. Update report 1165614 to change model MC4 ratings to 100-240 Vac, 0.2 A, 50/60 Hz or 24 Vdc, 3 W (C/US)
History		
1437917	2003/05/14	Update to change the input voltage rating of Model MC6.
1288491	2002/02/06	Update to include 24 V dc version of the controller Models MC4 and MC6.
1165614 MC6)	2001/02/01	Original Certification. (Reissue Report LR 90200-14 and update to include model



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Power Supplies

#### Safety

• Laser Scanners • Safety Mats • Edges and Bumpers • Programmable Safety Controllers • Light Curtains • Safety Relays • Safety Interlock Switches

Printed on recycled paper. 🏵

F228I-E-01 07/11 Note: Specifications are subject to change.

Printed in U.S.A.