



# Certificate of Compliance

**Certificate:** 2313376

**Master Contract:** 205557

**Project:** 80158247

**Date Issued:** 2023-05-05

**Issued To:** Endress+Hauser Conducta GmbH & Co. KG  
Dieselstraße 24  
Gerlingen, Baden-Württemberg, 70839  
Germany

**Attention:** Dirk Löffler

*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:** Andreas von der Brölie  
Andreas von der Brölie



## **PRODUCTS**

CLASS - C225206 - PROCESS CONTROL EQUIPMENT Process Control Equipment

CLASS - C225286 - PROCESS CONTROL EQUIPMENT Certified to US Standards

Controller, Model Liquiline xM442; Input rated 100-230Vac, 50/60Hz, max. 55VA (AC Version) or 24Vac, 50/60Hz, max. 55VA, 24Vdc, max. 22Watts (24Vac/dc Version). One set of relay contacts rated 250V ac, 0.5 Amps (alarm contacts); another 2 or 4 sets rated 250Vac, 2 Amps. 2 or 4 4-20mA signal circuits, probe and sensor connections all SELV (HART, Fieldbus, Profibus, Modbus, Ethernet) 1 set of 2 digital inputs and 2 digital outputs (passive), with auxiliary voltage 24V DC (max. 50mA); ambient -20 to 60° C, Enclosure Type 4X, Pollution Degree 2, Installation Category II.

Controller, Model Liquiline xM444 and xM448; Input rated 100-230Vac, 50/60Hz, max. 73VA (AC Version) or 24Vdc, max. 68 Watts (24Vdc Version). One set of relay contacts rated 250V ac, 0.5 Amps (alarm contacts); another 2 or 4 sets rated 250Vac, 2 Amps. 2 or 4 4-20mA signal circuits, probe and sensor connections all SELV



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(HART, Fieldbus, Profibus, Modbus, Ethernet) 1 or 2 sets of 2 digital inputs and 2 digital outputs (passive), with auxiliary voltage 24V DC (max. 50mA). ambient temperature, xM444 -20 to 55° C, xM448 -20 to 55° C and -20 to 50° C for selected packages; Enclosure Type 4X, Pollution Degree 2, Installation Category II.

Controller for rack installation, Model Liquiline xM442R; Input rated 100-230Vac, 50/60Hz, max. 55VA (AC Version) or 24Vac, 50/60Hz, max. 55VA, 24Vdc, max. 22Watts (24Vac/dc Version). One set of relay contacts rated 250V ac, 0.5 Amps (alarm contacts) another 2 or 4 sets rated 250Vac, 2 Amps. 2 or 4 4-20mA signal circuits, probe and sensor connections all SELV (HART, Fieldbus, Profibus, Modbus, Ethernet) 1 set of 2 digital inputs and 2 digital outputs (passive), with auxiliary voltage 24V DC (max. 50mA); ambient 0 to 60° C, Pollution Degree 2, Installation Category II; (optional) remote cabinet display 71185295 (enclosure type 4X, IP66) and service display 71185296.

Controller for rack installation, Model Liquiline xM444R and xM448R; Input rated 24Vdc, max. 50 Watts. One set of relay contacts rated 250V ac, 0.5 Amps (alarm contacts) another 2 or 4 sets rated 250Vac, 2 Amps. 2 or 4 4-20mA signal circuits, probe and sensor connections all SELV (HART, Fieldbus, Profibus, Ethernet, Modbus) 1 or 2 sets of 2 digital inputs and 2 digital outputs (passive), with auxiliary voltage 24V DC (max. 50mA); Ambient temperature, CM444 0 to 55° C, CM448 0 to 55° C and 0 to 50° C for selected packages; Pollution Degree 2, Installation Category II; (optional) remote cabinet display 71185295 (enclosure type 4X, IP66) and service display 71185296.

Controller, Model Liquiline xM44P (FIH option); Input rated 100-230Vac, 50/60Hz, max. 73VA (AC Version) or 24Vdc, max. 68 Watts (24Vdc Version). One set of relay contacts rated 250V ac, 0.5 Amps (alarm contacts) another 2 or 4 sets rated 250Vac, 2 Amps. 2 or 4 4-20mA signal circuits, probe and sensor connections all SELV (HART, Fieldbus, Profibus, Ethernet, Modbus) 1 or 2 sets of 2 digital inputs and 2 digital outputs (passive), with auxiliary voltage 24V DC (max. 50mA); ambient temperature, -20 to 50° C; Enclosure Type 4X, Pollution Degree 2, Installation Category II.

Controller, Model Liquiline xM44P (DIN option); Input rated 24Vdc, max. 50 Watts. One set of relay contacts rated 250V ac, 0.5 Amps (alarm contacts) another 2 or 4 sets rated 250Vac, 2 Amps, 2 or 4 4-20mA signal circuits, probe and sensor connections all SELV (HART, Fieldbus, Profibus, Ethernet, Modbus) 1 or 2 sets of 2 digital inputs and 2 digital outputs (passive), with auxiliary voltage 24V DC (max. 50mA); ambient temperature, 0 to 50° C; Pollution Degree 2, Installation Category II.

Digital Sensor, models xCS50D, xCS51D, xCS55D, xCS58D and xCS120D, supplied from xM44xR at 3.1Vdc, 3.5mA max; ambient temperature, 0 to 60° C

#### Notes:

1. All models or model options rated at 24V (ac or dc) to be supplied by a Class 2 or Limited Energy Source in accordance with CSA 61010-1-12.
2. Controller models xM442R / xM444R / xM448R and xM44P (DIN option) are certified as components for use in other equipment where the suitability of the combination is to be determined.
3. Prefix x = C or O or OC



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## **APPLICABLE REQUIREMENTS**

### **CSA Standards:**

CAN/CSA-C22.2 No. 61010-1-12 - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements

### **UL Standards:**

ANSI/UL Std. No. 61010-1 (3<sup>rd</sup> Edition) - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements

## **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 with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

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### **Nameplate adhesive label material approval information (controllers only):**

FlexCon, type LAZRetch PM-200 (CSA, LS99214), UL Listed as ELTEX, type TOP script 101720 (MH 47225)

### **Controllers:**

**General:** Markings appear as outlined in the Certification Report on an adhesive nameplate. Labels, if shown in the report, may vary slightly in layout, provided that the required information continues to be shown





The following markings appear on the product:

- 1 Submittor's identification (company name and/or file number and/or registered tradename);






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- 2 Model number
- 3 Electrical rating;
- 4 Date of manufacture: Month and year of manufacture or date code. If a serial number is used instead of date of manufacture, a record of serial numbers shall be kept traceable to date of manufacture. (Not related to date of sale).
- 5 The CSA Monogram with C/US subscript; The product may bear one of the following CSA Markings:
-  , or  , or .
- 6 Temperature rating
- 7 CSA Enclosure Type 4X for models xM442, xM444 and xM448, xM44P (FIH option) and External graph display, cabinet 7118529 only
- 8 Protective earthing TERMINAL is identified by the IEC 417 No 5019 symbol  , adjacent to the TERMINAL;
- 9 Neutral is identified by the letter "N" (for units with a non-detachable supply cord or PERMANENTLY CONNECTED EQUIPMENT, 100-230Vac version).

**Digital Sensors:** marking though silk screening / laser printing

- 1 Submittor's identification (company name and/or file number and/or registered tradename);
- 2 Model number
- 3 Date of manufacture: Month and year of manufacture or date code. If a serial number is used instead of date of manufacture, a record of serial numbers shall be kept traceable to date of manufacture. (Not related to date of sale).
- 4 The CSA Monogram with C/US subscript; The product may bear one of the following CSA Markings:
-  , or  , or .
- 5 Temperature rating

Notes:

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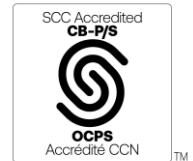


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Products certified under Class C225206, C225286 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). [www.scc.ca](http://www.scc.ca)





## *Supplement to Certificate of Compliance*

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*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>
80158247	2023-05-05	Update to Report 2313376 for the addition of alternate enclosure material: Lexan 915, Lexan 945 (UL listed, in accordance with UL 746C), alternate connectors (UL listed) and addition of Bluetooth module FWBT1.
80081453	2021-06-21	Update report 2313376, to cover the addition of new modules 2DS Ex-I to CM44x(R) controllers. 2DS Ex-I modules are supplied by the controller power supply at 24V.
80069886	2021-02-22	Update to cCSAus report # 2313376 (last project 80054491) for addition of a new ozone sensor model xCS58D using existing electronics, a new membrane, electrolyte and housing material POM.
80054491	2020-09-15	Update report 2313376 to cover typo error corrections and add alternate relays.
80038473	2020-06-02	Update report 2313376 to cover the addition of an alternate transformer; testing and construction evaluation required.
80016978	2019-09-17	Update report 2313376 to cover the addition of an alternate components (cable gland).
80002856	2019-07-26	<p>Update report 2313376 to cover:</p> <ul style="list-style-type: none"><li>- modifications of modules FXHC1, FSIP1, FD4W2 and FXIO1</li><li>- addition of new module FSDG3 SPECTRO</li><li>- addition of alternate relays</li></ul> <p>All revisions, as outlined in document 'Overview Modifications_CSAGP_xM44xR', received on April 16.</p> <p>Samples will be requested once the quote is accepted.</p>
70208507	2019-02-20	Update report 2313376 to cover modifications of pc board FC4W3 and addition of sensor models xCS50D, xCS51D, xCS57D, xCS120D.



70153786	2018-01-30	Update report 2313376 to cover an alternate construction.
70094522	2016-09-06	Update to report 2313376 to cover revisions on base module FXHC1.
70082227	2016-06-17	Update to report #2313376 to add a new model CM44P.
70019254	2015-11-10	Update report to cover evaluation to CSA C22.2 No. 61010-1-12 and UL 61010-1 (3rd Edition); alternate construction of top and bottom part of enclosure; modifications to ac and dc input power modules.
2742279	2014-09-10	Update report to include rack mounted models CM442R/444R/448R.
2734019	2014-06-12	Update report to cover the addition of alternate line filters.
2644792	2013-11-12	Update report to add a 24V power supply and I/O module to CM44x models.
2567343	2012-11-23	Update report to cover report clarification.
2505341	2012-06-11	Evaluation of Model Liquiline CM444/448 to C22.2 No. 61010-1-04 and UL 61010
2373633	2010-11-29	Update to report 2313376 to cover alternate construction
2313376	2010-08-12	Evaluation of Model Liquiline CM442 to C22.2 No. 61010-1-04 & UL 61010