



Certificate of Compliance

Certificate: 2313376 **Master Contract:** 205557
Project: 80220618 **Date Issued:** 2025-01-30
Issued to: Endress+Hauser Conducta GmbH & Co. KG
Dieselstraße 24
Gerlingen, Baden-Württemberg 70839
Germany

Attention: Henryk Hofmann

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 Brellie
Andreas von der Brellie

PRODUCTS

Class 2252 06 PROCESS CONTROL EQUIPMENT - Process Control Equipment

Class 2252 86 PROCESS CONTROL EQUIPMENT - Certified to US Standards

Controller

Liquiline

Model(s)	Ambient Temp (°C)	Enclosure Type	Installation Category	Pollution Degree	Enclosure IP Rating
xM442	-20 to 60	4X	II	2	IP66, IP67

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)



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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.

Liquiline

Model(s)	Enclosure Type	Installation Category	Pollution Degree	Enclosure IP Rating
xM448, xM444	4X	II	2	IP66, IP67

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, 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

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.
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Model(s)	Ambient Temp (°C)	Enclosure Type	Installation Category	Pollution Degree	Enclosure IP Rating
xM44P	-20 to 50	4X	II	2	IP66, IP67

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);

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



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CSA 61010-1-12.

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Liquiline

Model(s)	Ambient Temp (°C)	Input Power (W max)	Input Voltage (VDC)	Installation Category	Pollution Degree
xM44P	0 to 50	50	24	II	2

xM44P (DIN option)

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))

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.
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Controller for rack installation

Liquiline

Model(s)	Ambient Temp (°C)	Installation Category	Pollution Degree
xM442R	0 to 60	II	2

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).

(optional) remote cabinet display 71185295 (enclosure type 4X, IP66) and service display 71185296.

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.



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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.
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Liquiline

Model(s)	Installation Category	Pollution Degree
xM444R, xM448R	II	2

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;(optional) remote cabinet display 71185295 (enclosure type 4X, IP66) and service display 71185296.

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.
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Digital Sensor, supplied from xM44xR at 3.1Vdc, 3.5mA max

Model(s)	Ambient Temp (°C)
xCS51D, xCS55D, xCS50D, xCS58D, xCS120D	0 to 60

Notes:

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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.
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APPLICABLE REQUIREMENTS

UL 61010-1, 3rd Edition (May 11, 2012) - UL Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements



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CSA C22.2 No. 61010-1-12 - Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1:
General requirements



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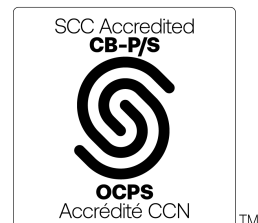
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Notes:

Products certified under Class(es) C225206, C225286 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). 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

Project	Date	Description
80220618	2025-01-30	Update to report 2313376 to add new card module including temperature test
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	Update report 2313376 to cover: - modifications of modules FXHC1, FSIP1, FD4W2 and FXIO1 - addition of new module FSDG3 SPECTRO - addition of alternate relays All revisions, as outlined in document 'Overview Modifications_CSAGP_xM44xR', received on April 16. Samples will be requested once the quote is accepted.
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.



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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