

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**

2. **Certificate No:** FM16US0145X

3. **Equipment:** Liquiline M CM42 Transmitter and Sensors
(Type Reference and Name)

4. **Name of Listing Company:** Endress+Hauser Conducta GmbH+Co KG

5. **Address of Listing Company:** Dieselstrasse 24
D70839 Gerlingen
Germany

6. The examination and test results are recorded in confidential report number:

3024021 dated 6th December 2005

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2018, FM Class 3610:2010, FM Class 3611:2021, FM Class 3810:2005,
ANSI/ISA 60079-0:2009, ANSI/ISA 60079-11:2014, ANSI/IEC 60529:2004, ANSI/UL 121201:2019

8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

10. Equipment Ratings:

Intrinsically Safe for Class I, Division 1, Groups A, B, C and D; Class I, Zone 0, Group IIC; IP67

Non Incendive for Class I, Division 2; Groups A, B, C and D; Class I, Zone 2, Group IIC with Nonincendive field wiring connections to Class I, Division 2, Group A, B, C, and D and Class I, Zone 2, Groups IIC; IP67

Certificate issued by:

J.E. Marquedant
VP, Manager - Electrical Systems

25 October 2021
Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

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FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
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11. The marking of the equipment shall include:

Class I Division 1, Groups A, B, C, D; T* Ta = -20°C to +50°C; IP66/67

Class I, Zone 0, Group IIC T6 Ta = -20°C to +50°C, IP66/67

Class I, Division 2, Groups A, B, C, and D; T*, Ta = -20°C to +50°C; IP66/67

*see model for T code

12. **Description of Equipment:**

General - The Liquiline M CM42 Transmitter with FBPA3 Communication Module is a two wire device used in the area of process control. The Liquiline M CM42 Transmitters when used with appropriate sensors perform pH, conductivity, temperature, and redox measurements. The transmitter consists of a CPU Module FMIH1 (FBIH1 Communications Assembly and FC2W1 CPU Assembly) or CPU Module FMPA1 (FBPA1 Communications Assembly and FC2W1 CPU Assembly) or CPU Module FMPA3 (FBPA3 Communications Assembly and FC2W1 CPU Assembly) including a Display Assembly FD2W1. The ambient operating temperature range is -20°C to +50°C.

Cable xYK10/xYK20 for the connection of digital Memosens sensors is assigned entity parameter Po = 178 mW. All Memosens sensors with specified parameter Pi equal to or higher than Po are connectable to cable xYK10/xYK20.

Construction - The transmitter circuitry is housed inside a plastic or stainless steel enclosure.

Ratings - The transmitter is a modular design powered by 30Vdc or from 17.5Vdc. Ta = -20°C to +50°C; IP66/67

Liquiline M CM42-abcdefghijkl. Transmitter.

IS/I/1/ABCD/T6 Ta = +50 °C – XA01687C, Entity; IP67

I/O/AEx ia IIC/T6 Ta = +50 °C – XA01687C, Entity; IP67

NI/I/2/ABCD/T6 Ta = +50 °C – XA01687C; NIFW; IP67

Entity & Nonincendive Field Wiring Parameters:

When using the Assembly FBIH1

Terminals	V _{max} (V)	I _{max} (mA)	P _i (mW)	C _i (nF)	L _i (μH)
133 and 134	30	100	800	1.2	29
233 and 234	30	100	800	0.2	24

When using the Assembly FBPA1 or FBPA3

Terminals	V _{max} (V)	I _{max} (mA)	P _i (W)	C _i (nF)	L _i (μH)
997 and 998	17.5	380	5.32	5	10

a = Measurement type and input: A, C, I, K, L, M, N, O, P or R.

b = Approval type: P.

c = Manufacturer's certificate: A, B or C.

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- d = Measurement output: 0, 1, 2, 3, 5 or 6.
- e = Enclosure: 0 or 1.
- g = Cable connection: 0, 1 or 2.
- h = Software: EA, EB or EC.
- i = Language: A through Z.
- k = Documentation: 0 or 1.

CLS12, CLS13, CLS15, CLS21. Conductivity Probes. (When used with Liquiline M CM42 Transmitter.)

- IS/I/1/ABCD/T6 Ta = +75 °C – XA01687C
- I/O AEx ia IIC/T6 Ta = +75 °C – XA01687C
- NI/I/2/ABCD/T6 Ta = +75 °C
- I/2/IIC/T6 Ta = +75 °C

CLS16-abc. Conductivity Probes. (When used with Liquiline M CM42 Transmitter.)

- IS/I/1/ABCD/T6 Ta = +75 °C – XA01687C
- NI/I/2/ABCD/T6 Ta = +75 °C
- I/O AEx ia IIC/T6 Ta = +75 °C – XA01687C
- I/2/IIC/T6 Ta = +75 °C

- a = Process connection: 3C, 3D, 3E, 4C, 4D or 4E.
- b = Cable connection: 1, 2 or 3.
- c = Temperature sensor: A or B.

CLS50-Oabc. Conductivity Probe. (When used with Liquiline M CM42 Transmitter.)

- IS/I/1/ABCD/T6 Ta = +75 °C – XA01687C
- NI/I/2/ABCD/T6 Ta = +75 °C
- I/O AEx ia IIC/T6 Ta = +75 °C – XA01687C
- I/2/IIC/T6 Ta = +75 °C

- a = Process connection and material (any single character code, non-safety relevant): A to Z or 0 to 9.
- b = Probe material (any single character code, non-safety relevant): A to Z or 0 to 9.
- c = Max temperature +125 °C and cable length 60 m: 1, 2, 3, 4 or 9.

CLS15D-AaO. Digital Conductivity Sensor. (When used with Liquiline M CM42 Transmitter and Cable xYK10-O, xYK10-G** or xYK20-FA**.)**

- IS/I/1/ABCD/T6 Ta = +70 °C – XA01687C
- I/O AEx ia IIC/T6 Ta = +70 °C – XA01687C
- NI/I/2/ABCD/T6 Ta = +70 °C
- I/2/IIC/T6 Ta = +70 °C

- a = Process connection and material (any 2 character code, non-safety relevant): 1A to 9Z.
- x = C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

CLS15D-BaO. Digital Conductivity Sensor. (When used with Liquiline M CM42 Transmitter and Cable xYK10-O, xYK10-G** or xYK20-FA**.)**

- IS/I/1/ABCD/T6 Ta = +50 °C – XA01687C
- I/O AEx ia IIC/T6 Ta = +50 °C – XA01687C
- NI/I/2/ABCD/T6 Ta = +50 °C
- I/2/IIC/T6 Ta = +50 °C

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a = Process connection and material (any 2 character code, non-safety relevant): 1A to 9Z.
x = C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

CLS16D-abO. Digital Conductivity Sensor. (When used with Liquiline M CM42 Transmitter and Cable xYK10-O, xYK10-G** or xYK20-FA**.)**

IS/I/1/ABCD/T6 Ta = +65 °C – XA01687C
I/O AEx ia IIC/T6 Ta = +65 °C – XA01687C
NI/I/2/ABCD/T6 Ta = +65 °C
I/2/IIC/T6 Ta = +65 °C

a = Process connection and material (any 2 character code, non-safety relevant): 1A to 9Z.
b = Optional equipment (any 2 character code, non-safety relevant): 1A to 9Z.
x = C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

CLS21D-yaO. Digital Conductivity Sensor. (When used with Liquiline M CM42 Transmitter and Cable xYK10-O, xYK10-G** or xYK20-FA**.)**

IS/I/1/ABCD/T6 Ta = +65 °C – XA01687C
I/O AEx ia IIC/T6 Ta = +65 °C – XA01687C
NI/I/2/ABCD/T6 Ta = +65 °C
I/2/IIC/T6 Ta = +65 °C

y = C indicates measuring range: 10.0 µS to 20 mS/cm (k = 1) / L indicates PWIS-free, measuring range: 10.0 µS to 20 mS/cm (k = 1).
a = Process connection and material (any 2 character code, non-safety relevant): 1A to 9Z.
x = C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

CLS50D-FBabcd, Digital Conductivity Sensor.

IS/I/1/ABCD/T* – XA01687C
I/O AEx ia IIC/T* – XA01687C
NI/I/2/ABCD/T*
I/2/IIC/T*

a = Process connection (any single character, non-safety relevant): A-C, 1-8.
b = Material: Sensor, seal, adapter (any single character): B, C, D.
c = Cable length: 1(3m), 2(7m), 3(15m), 7(...m fixed cable, max 50m), 9(...ft fixed cable, max 164ft).
d = Connection: 1 = Cable, 2 = Cable with plug-in connector M12.

T*: Temperature class depends on ambient temperature (Ta) and probe material as shown:

Sensor Type	Temperature Class T4	Temperature Class T6
CLS50D-FBaBcd	-20 °C ≤ Ta ≤ +120 °C	-20 °C ≤ Ta ≤ +70 °C
CLS50D-FBaCcd	-20 °C ≤ Ta ≤ +120 °C	-20 °C ≤ Ta ≤ +70 °C
CLS50D-FBaDcd	-20 °C ≤ Ta ≤ +110 °C	-20 °C ≤ Ta ≤ +70 °C

CLS82D-FBab, Digital Conductivity Sensor. (When used with Liquiline M CM42 Transmitter and Cable xYK10-O, xYK10-G** or xYK20-FA**.)**

IS/I/1/ABCD/T* – XA01687C
I/O AEx ia IIC/T* – XA01687C
NI/I/2/ABCD/T*

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I/2/IIC/T*

a = Process connection (any single character, non-safety relevant): A-Z, 1-9.

b = Material: Sensor (any single character): A, B or Y.

x = C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

T*: Temperature class depends on sensor type and ambient temperature (Ta) as shown:

Sensor Type	Temperature Class T3	Temperature Class T4	Temperature Class T6
CLS82D-FBab	-20°C ≤ Ta ≤ +140°C	-20°C ≤ Ta +120°C	-20°C ≤ Ta ≤ +70°C

COS21D-a13b1. Digital Oxygen Sensor. (When used with Liquiline M CM42 Transmitter and Cable xYK10-O, xYK10-G** or xYK20-FA**.)**

IS/I/1/ABCD/T6 Ta = +70 °C – XA01687C

I/O AEx ia IIC/T6 Ta = +70 °C – XA01687C

NI/I/2/ABCD/T6 Ta = +70 °C

I/2/IIC/T6 Ta = +70 °C

a = Application: A, B or C.

b = Certificate: 1 or 2.

x = C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

COS22D-8Aabcd3. Digital Oxygen Sensor (When used with Liquiline M CM42 Transmitter and Cable xYK10-O, xYK10-G** or xYK20-FA**.)**

IS/I/1/ABCD/T6 Ta = +70 °C – XA01687C

I/O AEx ia IIC/T6 Ta = +70 °C – XA01687C

NI/I/2/ABCD/T6 Ta = +70 °C

I/2/IIC/T6 Ta = +70 °C

a = Measurement Range: 1, 2 or 3.

b = Shaft length, diameter, process connection: A2, A4, A5, A6, B1 or B2.

c = Material membrane cup: B, D or E.

d = O-ring material: 2, 3, 4 or 5.

x = C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

COS51D-Oa8b0. Digital Oxygen Sensor. (When used with Liquiline M CM42 Transmitter and xYK10-O, xYK10-G** or xYK20-FA**.)**

IS/I/1/ABCD/T6 Ta = +50 °C – XA01687C

I/O AEx ia IIC/T6 Ta = +50 °C – XA01687C

NI/I/2/ABCD/T6 Ta = +50 °C

I/2/IIC/T6 Ta = +50 °C

a = Sensor head NPT thread: S.

b = Diaphragm cap: 0 or 1.

x = C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

CPF8aD-7bcO. pH/ORP Digital Sensor. (When used with Liquiline M CM42 Transmitter.)

IS/I/1/ABCD/T6 Ta = +70 °C – XA01687C

I/O AEx ia IIC/T6 Ta = +70 °C – XA01687C

NI/I/2/ABCD/T6 Ta = +70 °C

I/2/IIC/T6 Ta = +70 °C

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- a = 1 (pH) or 2 (ORP).
- b = Application range: LH, NN or PA.
- c = Insertion length: 1 (23 mm), 2 (13 mm) or 3 (58 mm).

CPF81-ab1cd. pH Electrode. (When used with Liquiline M CM42 Transmitter.)

- IS/I/1/ABCD/T6 Ta = +75 °C – XA01687C
- I/O AEx ia IIC/T6 Ta = +75 °C – XA01687C
- NI/I/2/ABCD/T6 Ta = +75 °C
- I/2/IIC/T6 Ta = +75 °C

- a = Application LH, LN, NH or NN.
- b = Version 1, 2 or 3.
- c = Equipment A or C.
- d = Cable connection: 2 or 3.

CPF82-PAa1Ab. pH Electrode. (When used with Liquiline M CM42 Transmitter.)

- IS/I/1/ABCD/T6 Ta = +75 °C – XA01687C
- I/O AEx ia IIC/T6 Ta = +75 °C – XA01687C
- NI/I/2/ABCD/T6 Ta = +75 °C
- I/2/IIC/T6 Ta = +75 °C

- a = Version: 1 or 3.
- c = Cable connection: 2 (4.5 m), 3 (9 m), 4 (13 m) or 8 (plug).

CPS11, CPS12, CPS13, CPS41, CPS42, CPS64, CPS71, CPS72, CPS91, CPS92. pH Electrodes. (When used with Liquiline M CM42 Transmitter.)

- IS/I/1/ABCD/T6 Ta = +75 °C – XA01687C
- I/O AEx ia IIC/T6 Ta = +75 °C – XA01687C
- NI/I/2/ABCD/T6 Ta = +75 °C
- I/2/IIC/T6 Ta = +75 °C

CPS441, CPS471, CPS491. ISFET-Sensors. (When used with Liquiline M CM42 Transmitter.)

- IS/I/1/ABCD/T6 Ta = +75 °C – XA01687C
- I/O AEx ia IIC/T6 Ta = +75 °C – XA01687C
- NI/I/2/ABCD/T6 Ta = +75 °C
- I/2/IIC/T6 Ta = +75 °C

CPS16D-abcG, CPS76D-abcG, CPS96D-abcG, Digital pH/ORP Sensors (When used with Liquiline M CM42 Transmitter and Cable xYK10-O, xYK10-G** or xYK20-FA**.)**

- IS/I/1/ABCD/T* - XA01687C
- I/O AEx ia IIC/ T* - XA01687C
- NI/I/2/ABCD/ T*
- I/2/IIC/ T*

- a = Version: 7(basic), 8(SIL).
- b = Application specific version: (any 2 characters, non-safety relevant).
- c = Shaft length: (2, 4, 5, 6 or 9, 120mm up to 425mm, non-safety relevant).
- d = Not applicable to xPS16D-abcG, xPS76D-abcG or xPS96D-abcG (non-safety relevant).
- x = C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

T*: Temperature class depends on sensor type and ambient temperature (Ta) as shown:

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Sensor Type	Temperature Class T3	Temperature Class T4	Temperature Class T6
CPS16D-abcdG	-15 °C ≤ Ta ≤ +135 °C	-15 °C ≤ Ta ≤ +120 °C	-15 °C ≤ Ta ≤ +70 °C
CPS76D-abcdG	0 °C ≤ Ta ≤ +135 °C	0 °C ≤ Ta ≤ +120 °C	0 °C ≤ Ta ≤ +70 °C
CPS96D-abcdG	Not applicable	0 °C ≤ Ta ≤ +110 °C	0 °C ≤ Ta ≤ +70 °C

CPSa-bcdef. pH Digital Sensor. (When used with Liquiline M CM42 Transmitter and Cable xYK10-O**, xYK10-G** or xYK20-FA**.)

IS/I/1/ABCD/T6 Ta = +70 °C – XA01687C
I/O AEx ia IIC/T6 Ta = +70 °C – XA01687C
NI/I/2/ABCD/T6 Ta = +70 °C
I/2/IIC/T6 Ta = +70 °C

- a = 11D, 31D, 41D, 71D, or 91D.
- b = 7.
- c = Working range (any 2 letter code, non-safety relevant): AA to ZZ.
- d = Shaft length: 2, 4, 5 or 6.
- e = Electrolyte supply: A or B.
- f = Approval type: G.
- x = C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

xPSSa-FBbcde. pH Digital Sensor. (When used with Liquiline M CM42 Transmitter and Cable xYK10-O**, xYK10-G** or xYK20-FA**.)

IS/I/1/ABCD/T6 Ta = +70 °C – XA01687C
I/O AEx ia IIC/T6 Ta = +70 °C – XA01687C
NI/I/2/ABCD/T6 Ta = +70 °C
I/2/IIC/T6 Ta = +70 °C

- a = 171D
- b = 7.
- c = Electrode type (any one letter code, non-safety relevant): A to Z.
- d = Reference system (any two letter code, non-safety relevant): AA to ZZ.
- e = Shaft length: 2, 4, 5, 6 or 9 (max. 600 mm).
- x = C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

xPSSa-bcdef. ORP Digital Sensor. (When used with Liquiline M CM42 Transmitter and cable xYK10-G**, xYK10-O** or xYK20-FA**.)

IS / I / 1 / ABCD / T6 Ta = 70°C - XA01687C
NI / I / 2 / ABCD / T6 Ta = 70°C
I / 0 / AEx ia / IIC / T6 Ta = 70°C - XA01687C
I / 2 / IIC / T4 Ta = 70°C

- a = 171D
- b = 7.
- c = Electrode type (any one letter code, non-safety relevant): A to Z.
- d = Reference system (any two letter code, non-safety relevant): AA to ZZ.
- e = Shaft length: 2, 4, 5, 6 or 9 (max. 600 mm).
- x = C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

CPSa-bcdef. ORP Digital Sensor. (When used with Liquiline M CM42 Transmitter and Cable xYK10-O**, xYK10-G** or xYK20-FA**.)

IS/I/1/ABCD/T6 Ta = +70 °C – XA01687C
I/O AEx ia IIC/T6 Ta = +70 °C – XA01687C

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NI/I/2/ABCD/T6 Ta = +70 °C

I/2/IIC/T6 Ta = +70 °C

a =12D, 42D, 72D or 92D.

b =7.

c =Working range: NA, PA or PB.

d =Shaft length: 2, 4, 5 or 6.

e =Electrolyte supply: A or B.

f =Approval type: G.

x =C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

CPS4a1D-7bcdG. Digital ISFET Sensor for pH Measurement. (When used with Liquiline M CM42 Transmitter and Cable xYK10-O**, xYK10-G** or xYK20-FA**.)

IS/I/1/ABCD/T6 Ta = +70 °C – XA01687C

I/O AEx ia IIC/T6 Ta = +70 °C – XA01687C

NI/I/2/ABCD/T6 Ta = +70 °C

I/2/IIC/T6 Ta = +70 °C

a =4, 7 or 9.

b =Shaft length: 2, 4, 5 or 6.

c =Electrolyte supply: A or B (only CPS441D).

d =Seal type: 1 or 2.

x =C indicates E+H Memosens products / O, OC indicates Label partner Memosens products.

CTS1-A2GSA. Temperature Probes. (When used with Liquiline M CM42 Transmitter.)

IS/I/1/ABCD/T6 Ta = +75 °C – XA01687C

I/O AEx ia IIC/T6 Ta = +75 °C – XA01687C

NI/2/ABCD/T6 Ta = +75 °C

I/2/IIC/T6 Ta = +75 °C

CTS1-A2ZSA. Temperature Probes. (When used with Liquiline M CM42 Transmitter.)

IS/I/1/ABCD/T6 Ta = +75 °C – XA01687C

I/O AEx ia IIC/T6 Ta = +75 °C – XA01687C

NI/2/ABCD/T6 Ta = +75 °C

I/2/IIC/T6 Ta = +75 °C

CTS1-D2GFB. Temperature Probes. (When used with Liquiline M CM42 Transmitter.)

IS/I/1/ABCD/T6 Ta = +75 °C – XA01687C

I/O AEx ia IIC/T6 Ta = +75 °C – XA01687C

NI/2/ABCD/T6 Ta = +75 °C

I/2/IIC/T6 Ta = +75 °C

CYPa-bcde. Memocheck Sensor Simulator. (When used with Liquiline M CM42 Transmitter.)

IS/I/1/ABCD/T6 Ta = +70 °C – XA01687C

I/O AEx ia IIC/T6 Ta = +70 °C – XA01687C

NI/I/2/ABCD/T6 Ta = +70 °C

I/2/IIC/T6 Ta = +70 °C

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- a =01D or 02D.
- b =Parameter (any 2 letter code, non-safety relevant): AA to ZZ.
- c =Working range: 1.
- d =Certificate: A.
- e =Approval type: G.

CYP03D-FCa. Memocheck Sensor Simulator. (When used with Liquiline M CM42 Transmitter.)

IS/I/1/ABCD/T4 Ta = +50 °C – XA01687C; IP65 (with battery compartment lid closed)
I/0/AEx ia/IIC/T4 Ta = +50 °C – XA01687C; IP65 (with battery compartment lid closed)
NI/2/ABCD/T4 Ta = +50 °C; IP65 (with battery compartment lid closed)
I/2/AEx ic/IIC/T4 Ta = +50 °C; IP65 (with battery compartment lid closed)

a = XX (Optional CYK10 Memosens Cable).

13. Specific Conditions of Use:

CYP03D-FCa. Memocheck Sensor Simulator. (When used with Liquiline M CM42 Transmitter.)

- 1) Memocheck Sensor Simulator to be used with battery options Duracell Plus/Plus Power Type MN1500 or Energizer Type EN91, Size: AA (LR6), 1.5 V (Nom) Alkaline-Manganese Dioxide Battery (Zn/MnO2).

Liquiline M CM42-abcdefghijkl. Transmitter.

- 1) **WARNING – Potential Electrostatic Charging Hazard – The enclosure is constructed from plastic. To prevent the risk of electrostatic sparking the plastic surface should only be cleaned with a damp cloth.**

14. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

16. Certificate History

Details of the supplements to this certificate are described below:

Date	Description
6 th December 2005	Original Issue.
11 th July 2016	<u>Supplement 10:</u> Report Reference:3057346 dated 11 th July 2016. Description of the Change: Modifications to the xYK10 and xYK20 cable. Updates and clarifications to the certificate. Reissue: Corrected Company Listing name to match Approval Report.
19 th July 2016	<u>Supplement 10 Reissue 1:</u> Corrected Company Listing name in AIM and associated documents.

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US Certificate Of Conformity No: FM16US0145X

Date	Description
9 th November 2016	<p><u>Supplement 11:</u> Report Reference: RR207154 dated 9th November 2016. Description of the Change: Update Section 12, Combined Certificates of Conformity FM16US0193X (Supplement 10) into FM16US0145X (Supplement 10 Reissue 1).</p>
28 th August 2017	<p><u>Supplement 12:</u> Report Reference: RR210733 dated 28th August 2017. Description of the Change: Update model code structure of Liquiline M CM42 Transmitter.</p>
27 th September 2017	<p><u>Supplement 13:</u> Report Reference: 3059837 dated 27th September 2017. Description of the Change:</p> <ol style="list-style-type: none"> 1. Addition of updated Memosens pH/ORP glass sensors CPSxxD with xx = 11, 12, 16, 41, 42, 71, 72, 76, 91, 92 and 96. 2. Also for the new sensor CPS171D and for the CPF81D sensor. 3. Update of model code structure.
1 st November 2019	<p><u>Supplement 14:</u> Report Reference: RR220077 dated 1st November 2019. Description of the Change:</p> <ul style="list-style-type: none"> • Updated Section 12 with Introduction of new entity parameter Po=178 mW of cable xYK10/xYK20. • Add new model code options for the CPSa-bcdef and CLS82D-FBab. • Remove reference to CM42 transmitter and Cable with the CLS50D-FBabcd-ef. • Update FM 3600 from 2011 to 2018.
30 th November 2020	<p><u>Supplement 15:</u> Report Reference: RR225161 dated 30th November 2020. Description of the Change:</p> <ul style="list-style-type: none"> • Remove reference to control drawing 139689 and replace with new control drawing XA01687C. • Added model xPSa-bcdef ORP Digital Sensor that missing with Supplement 13 update; Approval Report 3059837
25 th October 2021	<p><u>Supplement 16:</u> Report Reference: RR229567 dated 25th October 2021. Description of the Change:</p> <ul style="list-style-type: none"> • Labels updated to show correct control drawing number. • P_i is changed from 750mW to 800mW. • FM3611 is updated to 2021 • ANSI/UL 121201:2019 is added.

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

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