



UNITED KINGDOM CONFORMITY ASSESSMENT

UK TYPE EXAMINATION CERTIFICATE

Product or Protective System Intended for use in Potentially Explosive Atmospheres
UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

- 3 Type Examination Certificate No.: **TÜV 25 UKEX 7180 X** Issue: **00**
- 4 Product: **Transmitter Liquiline
type (x)CM42B-aabbccddeeff(g)**
- 5 Manufacturer: **Endress+Hauser Conducta GmbH+Co. KG**
- 6 Address: **Dieselstrasse 24
70839 Gerlingen
Germany**
- 7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 TÜV Rheinland UK Ltd, Approved Body number 2571, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.
- The examination and test results are recorded in the confidential report **331 / Ex 7180.00 / 25**
- 9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN 60079-11:2012

Except in respect of those requirements listed at section 18 of the schedule to this certificate.

- 10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to specific conditions of use specified in the schedule to this certificate.
- 11 This TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- 12 The marking of this product shall include the following:

 **II 1G Ex ia IIC T6/T4 Ga
-20 °C ≤ Ta ≤ +50/60 °C**

This certificate and its schedules may only be reproduced in its entirety and without change.

TÜV Rheinland UK Ltd

Solihull, 2025-06-21

Klauspeter Graff



This Type Examination Certificate without signature shall not be valid. Alterations are subject to approval by
TÜV Rheinland UK Ltd, 1011 Stratford Road, Shirley, Solihull, B90 4BN, Tel. +44 (0) 121 7969400
A UKAS accredited certification body, No. 8400

13 SCHEDULE TO UK TYPE EXAMINATION CERTIFICATE

14 CERTIFICATE NUMBER TÜV 25 UKEX 7180 X

15 Description of Product

Subject and type

Transmitter Liquiline

(x)CM42B-aabbccddeeff(g)

x "Manufacturer" (not ex relevant)

not used -> E+H-labelled version

x = O -> OEM/label partner-labelled version

aa Order option certification (not ex relevant)

such as ATEX marking, IECEx marking, CSA marking, ...

bb Sensor

11 Memosens

21 pH/ORP analogue

22 Conductive conductivity analogue

23 Inductive conductivity analogue

cc Output

AA 1 x 4...20 mA, HART

AB 2 x 4...20 mA

dd Enclosure

11 Plastics

12 Stainless steel

21 Rail mount

ee Cable glands

AA M20x1.5

AB NPT 1/2" (with adaptor)

AC G 1/2" (with adaptor)

ff Other options (not ex relevant)

g Optional = one or more characters determining optional features, e.g. test or other certificates/declarations (not ex relevant)

General product information

General description:

The loop-powered field measuring instrument (transmitter) Liquiline CM42B is used for liquid analysis in all areas of process engineering. The transmitter can be installed in hazardous gas atmospheres of up to zone 0.

Technical data

Electrical data:

Entity parameters for electrical connection:

Input parameters of current output 1 and 2 (terminals 33, 34)

Ui	30 V
Ii	100 mA
Pi	750 mW
Li	30 µH
Ci (output 1)	15.2 nF
Ci (output 2)	7.9 nF

Maximum values

IO parameters of CDI (internal) Interface (CDI interface is only for service use-case)

Ui

Maximum values

7 V

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li	600 mA
Pi	Internally limited
Li	Negligible
Ci	0 μ F
Uo	8 V
Io	85 mA
Po	140mW
Co	8.4 μ F
Lo	4 mH

Output parameters of digital sensor interface (Memosens) (terminals 87, 88, 97, 98)

Maximum values

U _{tr} (Trapezoidal output characteristic)	6.3 V
Uo	5 V
Io	100 mA
Po	120 mW
Li	Negligible
Ci	15.6 μ F
Lo	3.5 mH
Co	100 μ F

In addition to the table above, it is allowed to connect intrinsically safe certified MEMOSENS cables xYK10 and xYK20 according to IECEx BVS 11.0052X and the fixed cable MEMOSENS sensor CLS50D according to IECEx BVS 14.0004X.

Output parameters VSPH1/ pH/ ORP module (Terminals: 11, 12, 13, 14, 16, 17, 18, 20, 21, 22)

Maximum values

Uo	5 V
Io	30 mA
Po	37.5 mW
Li	Negligible
Ci	1 μ F
Lo	30 mH
Co	100 μ F

Output parameters VSLI1/ Cond. i module (field wiring terminals: 11, 12, 13, 15, 16, 17, 18, 20)

Maximum values

Uo	7.6 V
Io	95 mA
Po	100 mW
Li	Negligible
Ci	480 nF
Lo	3.5 mH
Co	10.4 μ F

Output parameters VSLC1/ Cond. C module (field wiring terminals: 11, 12, 13, 19, 20)

Maximum values

Uo	8.2 V
Io	30 mA
Po	38 mW
Li	Negligible
Ci	0 nF
Lo	30 mH
Co	7.6 μ F

13 SCHEDULE TO UK TYPE EXAMINATION CERTIFICATE**14 CERTIFICATE NUMBER TÜV 25 UKEX 7180 X****Environmental data**

T class	Ambient temperature
T6	-20 °C ≤ Ta ≤ +50 °C
T4	-20 °C ≤ Ta ≤ +60 °C

16 Test report No. (associated with this certificate issue): 331 / Ex 7180.00 / 25**17 Specific Conditions of Use**

1. The plastic enclosure version has a high risk of electrostatic discharge. The instructions of the user manual must be observed.
2. For the verification of intrinsically safe circuits according to EN/IEC 60079-14, the internal Ci needs to be taken into consideration and should be added to the total sum of concentrated capacitance.

18 Essential Health and Safety Requirements (Regulations Schedule 1)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

19 Drawings and Documents

Reg. no.	Document title:	Document no.:	Rev.:	Date:
1.	Marking Fedlgehäuse	-	-	-
2.	Marking Railmount	-	-	-
3.	Safety instructions	XA03540C/07/EN/01. 25-00	00	25.04.2025
4.	Nameplate			