



UK Type Examination Certificate CML 22UKEX2331X Issue 0

United Kingdom Conformity Assessment

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

2 Equipment Compact thermometer ITHERM TrustSens, types TM371 and TM372

3 Manufacturer Endress + Hauser Wetzer GmbH & Co. KG

4 Address **Obere Wank 1**

87484 Nesselwang

Germany

- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ, United Kingdom, Approved Body Number 2503, in accordance with Regulation 43 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential reports listed in Section 12.

- If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to specific conditions of use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This UK Type Examination certificate relates only to the design and construction of the specified equipment. Further requirements of the Regulations apply to the manufacturing process and supply of the product. These are not covered by this certificate.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-11:2012

EN 60079-26:2015

10 The equipment shall be marked with the following:

Refer to attached certificate EPS 21 ATEX 1 214 X, Issue 0 for specific marking of explosion protection symbols

Refer to attached certificate EPS 21 ATEX 1 214 X, Issue 0 for marked code and ambient temperature range.









11 Description

For product description refer to attached certificate EPS 21 ATEX 1 214 X, Issue 0.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	23 rd May 2022	R15421A/00	Issue of the prime certificate. EPS 21 ATEX 1 214 X, Issue 0 is attached and shall be referred to in conjunction with this certificate.

Note: Drawings that describe the equipment are listed or referred to in the Annex.

13 Conditions of Manufacture

For conditions of manufacture, refer to attached certificate EPS 21 ATEX 1 214 X, Issue 0.

Any routine tests/verifications required by the ATEX certification shall be conducted.

14 Specific Conditions of Use

For specific conditions of use, refer to attached certificate EPS 21 ATEX 1 214 X, Issue 0

Certificate Annex

Certificate Number CML 22UKEX2331X

Equipment Compact thermometer ITHERM TrustSens, types TM371

and TM372

Manufacturer Endress + Hauser Wetzer GmbH & Co. KG

The following documents describe the equipment defined in this certificate:

Issue 0

For all drawings, refer to attached certificate EPS 21 ATEX 1 214 X, Issue 0.







(1) EU - Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres Directive 2014/34/EU
- (3) EU Type Examination Certificate Number

EPS 21 ATEX 1 214 X

Revision 0

(4) Equipment:

Compact thermometer iTHERM TrustSens, types TM371 and TM372

(5) Manufacturer:

Endress + Hauser Wetzer GmbH & Co. KG

(6) Address:

Obere Wank 1 87484 Nesselwang

Germany

- (7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.
- (8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, certifies that this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 20TH0259.
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-11:2012

EN 60079-26:2015

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the annex to this certificate.
- (11) This EU Type Examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

II 1/2G Ex ia IIC T6...T1 Ga/Gb

II 1/2G Ex ia IIIC T85°C...T450°C Da/Db

Certification

Certification department of explosion protection

Tuerkheim, 2022-05-06

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH.





(13) Annex

(14) EU - Type Examination Certificate EPS 21 ATEX 1 214 X

Revision 0

(15) Description of equipment:

The Compact thermometer iTHERM TrustSens, type TM371 or TM372 is a self-calibrating thermometer with analogue output 4 to 20 mA with HART® protocol communication.

Electrical data:

Ui = 30 V DC Ii = 100 mA Pi = 750 mW

Pi = 600 mW for dust applications

(16) Reference number: 20TH0259

(17) Special conditions for safe use:

From the safety point of view, the thermometer shall be considered to be connected to earth (for details the instruction manual provided with the equipment shall be observed).

It is not permitted to use the configuration pins 2 and 4 when the thermometer is connected to electrical supply.

Electrostatic charge on the M12 connector shall be avoided in dust explosive atmospheres during operation and maintenance.

The temperature class is dependent on the ambient temperature and the process temperature:

Temperature class / Maximum surface temperature	Ambient temperature range housing Ta	Process temperature range Tp
T6 / T85 °C	-40 °C ≤ Ta ≤ +55 °C	-50 °C ≤ Tp ≤ +75 °C
T5 / T100 °C	-40 °C ≤ Ta ≤ +70 °C	-50 °C ≤ Tp ≤ +90 °C
T4 / T135 °C	-40 °C ≤ Ta ≤ +85 °C	-50 °C ≤ Tp ≤ +125 °C
T3 / T200 °C	-40 °C ≤ Ta ≤ +85 °C	-50 °C ≤ Tp ≤ +190 °C
T2 / T300 °C	-40 °C ≤ Ta ≤ +85 °C	-50 °C ≤ Tp ≤ +285 °C
T1 / T450 °C	-40 °C ≤ Ta ≤ +85 °C	-50 °C ≤ Tp ≤ +435 °C

(18) Essential health and safety requirements:

Met by compliance with standards.

Certification department of explosion protection

Tuerkheim, 2022-05-06

Jirich Feike