

UK Type Examination Certificate CML 21UKEX1424X 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 **Enclosures Type EJB*** or EJBX*****
- 3 Manufacturer **Pepperl+Fuchs SE**
- 4 Address **Lilienthalstrasse 200
68307 Mannheim
Germany**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 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.
- 7 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 60079-1:2014	EN IEC 60079-7:2015+A1:2018
EN 60079-11:2012	EN 60079-28:2015	EN 60079-31:2014







- 10 The equipment shall be marked with the following:

 II (**)

Ex db (***) IIA or IIB or IIB+H2 Gb or Ex tb (***) IIIC Db IP (****)

T.amb & T. cable : (***)

(**) One of the following categories:

 II 2 G or  II 2 D or  II 2 (1) G or  II 2 (1) D or  II 2(2) G or  II 2(2) D

(***) The type of protection, cable temperature in accordance with different factors as the internal equipment covered or not by an EU type examination certificate, ambient temperature and maximum power dissipated.

(****) In accordance with the minimum degrees of protection of accessories mounted on the enclosures.





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11 Description

The metallic enclosures made in aluminum alloy (EJB) or in stainless steel (EJBX) having different sizes and configurations are covered by the certificate CML 21UKEX1425U. This range is suitable for explosive gas explosive atmospheres of group I (in stainless steel only), IIA, IIB and IIB+H2 and for dust explosive atmospheres group IIIC.

These enclosures can have a blind cover or provided with rectangular or circular glass windows.

Enclosures could be fitted with accessories (breather/drains devices, pilot lights, operators..) covered by separated component certificates. The list of the components is defined in the annex of the certificate. In accordance with the technical documentations and instructions manual, they can also contain :

- 'IS' element covered by a separated certificate and/or 'NIS' elements.
- Batteries
- Electromagnetic, ultrasonic, radio frequency sources and new measurement instruments and equipment some equipment with type protection "Ex i", "Ex e", "Ex m", "Ex o", "Ex p" and "Ex q" covered by separated full conformity certificates.
- Optical fiber or laser with type of protection "op is" or "op pr" and lasers with type of protection "op is" covered by separated full conformity certificates. The enclosures could also contain the optical device type "OPC120" (not covered by separated full conformity certificate) protected by "op is".

The enclosures could be coupled by a certified sealing bushings with an enclosure with type protection "Ex de", "Ex e" or "Ex i" also covered by a full conformity certificate.

These enclosures get the degrees of protection IP66 without O-ring or IP66/67 with O-ring according to the IEC 60529 standard but the final marking should be in accordance with the minimum degrees of protection of accessories mounted on the enclosures.

PARAMETERS RELATING TO THE SAFETY:

- Maximum supply voltage for "IS" elements:250 V
- Rated frequency:50/60 Hz
- Maximum power of the signalling operators:5 W (T4,T3 with incandescent lamps of 5W)

The maximum dissipated powers are defined in the descriptive documents for the different ambient temperature ranges and according to the type of the enclosure (with or without windows), the class of temperature and the presence or absence of the thermal probe to protect 'IS' elements.

When thermal probes are used in order to protect the 'IS' elements regarding the high temperature, the maximum threshold of thermal probe shall be according with threshold value of $[(T_{IEx-2}) \pm 2^{\circ}C]$ with T_{IEx} = Maximum value of the certified ambient temperature of the "IS" elements.



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When thermal probes are used in order to protect the 'IS' elements regarding the low temperature, the maximum threshold of thermal probe shall be according with threshold value of $[(T_{minEx}+2) \pm 2^{\circ}C]$ with T_{minEx} = Minimum value of the certified ambient temperature of the "IS" elements.

In accordance with the component certificate IECEx INE 14.0028U, the enclosures can be used in the temperature range from -60°C (without windows) or -52,5°C (with windows) up to +60°C for Group IIB+H2. The Table 1 at the end details the accessories that could be fitted with the enclosures. The restrictions of uses of each component are detailed in the descriptive documents of the manufacturers.

The manufacturer should refer to the last issue of the component certificates to ensure the compliance with the conditions of uses on the end-product and with the final marking.

Uses of components covered by separated ATEX certificates:

The list of the components and their restrictions of uses are detailed in the descriptive documents of the manufacturers.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	07 May 2021	R14112G/00	Issue of Prime Certificate

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

13 Conditions of Manufacture

Conditions of manufacture are not present on certificate INERIS 14ATEX0022X Issue 3.

14 Specific Conditions of Use

The following conditions relate to the installation and/or safe use of the equipment:

- i. The width of the flameproof joints is superior to those specified in tables of EN 60079-1 standard. Contact the original manufacturer for any repairs of the flameproof joints.
- ii. The cover must be fixed with screws in stainless steel with quality higher or equal to A2-70 or A4-70 (minimum yield stress: 450 N/mm²), in accordance with the requirements of the manufacturer. The instructions for safe use are completed by those stipulated in the instruction manuals of the manufacturer and of each Ex-component fitted on the final product.

Certificate Annex

Certificate Number CML 21UKEX1424X
Equipment Enclosures Type EJB*** or EJBX***
Manufacturer Pepperl+Fuchs SE



The following documents describe the equipment defined in this certificate:

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For drawings describing the equipment, refer to attached certificate INERIS 14ATEX0022X. In addition to the drawings listed on INERIS 14ATEX0022X, the following drawings include the additional marking required for this UK Type Examination certification:

Drawing No	Sheets	Rev	Approved date	Title
16-1555CM-10	1 of 2	0	07 May 2021	Additional Marking Requirements for UKCA