



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX CML 23.0086X** Page 1 of 3 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2023-08-22
Applicant: **GDS Technologies Limited**
Fusion Point
Ash Lane
Garforth
Leeds LS25 2GA
United Kingdom
Equipment: **Gas Sensor types XDI+F1, XDIwin+F1, XDI+F1+, XDIwin+F1+, XDI+F1+S, XDIwin+F1+S**
Optional accessory:
Type of Protection: **Flameproof enclosure Ex "db", protection by enclosure Ex "tb"**
Marking: Ex db IIC T6...T4 Gb
Ex tb IIIC T85°C...T135°C Db

Approved for issue on behalf of the IECEx
Certification Body:

L A Brisk

Position:

Assistant Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

22 Aug 2023

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2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: **IECEX CML 23.0086X**

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Date of issue: 2023-08-22

Issue No: 0

Manufacturer: **GDS Technologies Limited**
Fusion Point
Ash Lane
Garforth
Leeds LS25 2GA
United Kingdom

Manufacturing locations: **GDS Technologies Limited**
Fusion Point
Ash Lane
Garforth
Leeds LS25 2GA
United Kingdom

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[GB/CML/ExTR23.0189/00](#)

Quality Assessment Report:

[GB/SIR/QAR06.0040/10](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX CML 23.0086X**

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Date of issue: 2023-08-22

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The gas sensor types XDI+F1 & XDlwin+F1, XDI+F1+ & XDlwin+F1+ and XDI+F1+S & XDlwin+F1+S consist of sensing head type GDS F1, F1+ and F1+S respectively and instrument housing type XD-I or XD-lwin.

See Annex for full description and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below:

See Annex for Specific Conditions of Use.

Annex:

[Annex to IECEx CML 23.0086X Issue 0.pdf](#)

Annexe to: IECEx CML 23.0086X Issue 0
Applicant: GDS Technologies Ltd
Apparatus: XDI+F1, XDIwin+F1, XDI+F1+, XDIwin+F1+ and XDI+F1+S, XDIwin+F1+S

Description

The gas sensor types XDI+F1 & XDIwin+F1, XDI+F1+ & XDIwin+F1+ and XDI+F1+S & XDIwin+F1+S consist of sensing head type GDS F1, F1+ and F1+S respectively and instrument housing type XD-I or XD-Iwin. Inside of the instrument housing are PCB boards and display electronics (type XDIwin+F1, F1+ and F1+S only). The instrument housing is equipped with two threaded entries for the installation of appropriate Ex equipment certified cable glands.

Gas detector type XDIwin+F1, F1+ and F1+S can be used in ambient temperatures up to +75°C. Gas detector type XDI+F1 can be used up to 85°C. Ambient temperatures ranges and appropriate temperature class/maximum surface temperature are given in specific conditions of use.

Notes:

- IECEx FTZU 18.0002X, Issue 0 is superseded by this certificate.
- The product covered by Issue 0 of this certificate remains identical to that previously covered by IECEx FTZU 18.0002X, Issue 0.
- This certificate does not include the performance tests according to IEC 60079-29-1.

Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.
- The manufacturer shall specify VMQ rubber O-ring for Limatherm XDI/XDI-win enclosures (FTZU 03 ATEX 0207U). Other materials are not permitted.

Specific Conditions of Use

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

- The measuring performance of the equipment has not been verified. The equipment has been assessed for safety against the listed standards only.





- ii. Gas detector type XDIWin+F1/F1+/F1+S:
 - Tamb -20°C to +35°C Temperature class/maximum surface temperature T6/T85°C
 - Tamb -20°C to +50°C Temperature class/maximum surface temperature T5/T100°C
 - Tamb -20°C to +75°C Temperature class/maximum surface temperature T4/T135°C
- Gas detector type XDI+F1/F1+/F1+S:
 - Tamb -20°C to +35°C Temperature class/maximum surface temperature T6/T85°C
 - Tamb -20°C to +50°C Temperature class/maximum surface temperature T5/T100°C
 - Tamb -20°C to +85°C Temperature class/maximum surface temperature T4/T135°C
- iii. The flameproof joints of this equipment are other than the minimums specified in EN 60079-1 and shall not be repaired by the user.

UK Type Examination Certificate CML 23UKEX1092X 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 **XDI+F1, XDIwin+F1, XDI+F1+, XDIwin+F1+ and XDI+F1+S, XDIwin+F1+S**
- 3 Manufacturer **GDS Technologies Ltd**
- 4 Address **Fusion Point, Ash Lane
Garforth, Leeds,
LS25 2GA, United Kingdom**

- 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 42 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 60079-31:2014

- 10 The equipment shall be marked with the following:

 II 2 GD

Ex db IIC T6...T4 Gb

Ex tb IIIC T85°C...T135°C Db

Ta= -20°C≤Ta≤+35°C...+75°C (XDIWin+F1, F1+ and F1+S)

Ta= -20°C≤Ta≤+35°C...+85°C (XDI+F1, F1+ and F1+S)





**CML 23UKEX1092X
Issue 0**

11 Description

The gas sensor types XDI+F1 & XDIwin+F1, XDI+F1+ & XDIwin+F1+ and XDI+F1+S & XDIwin+F1+S consist of sensing head type GDS F1, F1+ and F1+S respectively and instrument housing type XD-I or XD-Iwin. Inside of the instrument housing are PCB boards and display electronics (type XDIwin+F1, F1+ and F1+S only). The instrument housing is equipped with two threaded entries for the installation of appropriate Ex equipment certified cable glands.

Gas detector type XDIwin+F1, F1+ and F1+S can be used in ambient temperatures up to +75°C. Gas detector type XDI+F1 can be used up to 85°C. Ambient temperatures ranges and appropriate temperature class/maximum surface temperature are given in specific conditions of use.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	19 Apr 2023	R15843A/00	Issue of prime certification

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

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.
- ii. The manufacturer shall specify VMQ rubber O-ring for Limatherm XDI/XDI-win enclosures (FTZU 03 ATEX 0207U). Other materials are not permitted.



CML 23UKEX1092X
Issue 0

14 Specific Conditions of Use

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

- i. The measuring performance of the equipment has not been verified. The equipment has been assessed for safety against the listed standards only.
- ii. Gas detector type XDIWin+F1/F1+/F1+S:
 - Tamb -20°C to +35°C Temperature class/maximum surface temperature T6/T85°C
 - Tamb -20°C to +50°C Temperature class/maximum surface temperature T5/T100°C
 - Tamb -20°C to +75°C Temperature class/maximum surface temperature T4/T135°CGas detector type XDI+F1/F1+/F1+S:
 - Tamb -20°C to +35°C Temperature class/maximum surface temperature T6/T85°C
 - Tamb -20°C to +50°C Temperature class/maximum surface temperature T5/T100°C
 - Tamb -20°C to +85°C Temperature class/maximum surface temperature T4/T135°C
- iii. The flameproof joints of this equipment are other than the minimums specified in EN 60079-1 and shall not be repaired by the user.

F1, F1+ and F1+S Gas Sensors:

- i. When installed, each of the Gas Sensors shall be electrically bonded to earth.
- ii. The wiring from the rear of the Gas Sensor shall be mechanically protected e.g., in an enclosure that is suitable for the application and certified by a notified body.
- iii. No repair or alteration is permitted on Flameproof joints/threads.

Certificate Annex

Certificate Number CML 23UKEX1092X
Equipment XDI+F1, XDIwin+F1, XDI+F1+, XDIwin+F1+ and XDI+F1+S,
XDIwin+F1+S
Manufacturer GDS Technologies Ltd



The following documents describe the equipment defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
213.M.1.C	1 of 1	C	19 Apr 2023	XDIwin+F1/F1+/F1+S – General Arrangement
215.M.1.C	1 of 1	C	19 Apr 2023	XDI+F1/F1+/F1+S – General Arrangement
213.M.2.C	1 of 1	B	19 Apr 2023	XDI-XDIwin+F1/F1+/F1+S – Label Mounting
213.M.3.C	1 of 1	J	19 Apr 2023	XDI-XDIwin+F1/F1+/F1+S – Label Detail



EU Type Examination Certificate CML 23ATEX1232X Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **XDI+F1, XDIwin+F1, XDI+F1+, XDIwin+F1+ and XDI+F1+S, XDIwin+F1+S**
- 3 Manufacturer **GDS Technologies Ltd**
- 4 Address **Fusion Point, Ash Lane
Garforth, Leeds,
LS25 2GA, United Kingdom**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 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 intended for use in potentially explosive atmospheres given in Annex II to the Directive.

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 conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 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 60079-31:2014

- 10 The equipment shall be marked with the following:



II 2 GD

Ex db IIC T6...T4 Gb

Ex tb IIIC 85°C...T135°C Db

Ta = -20°C ≤ Ta ≤ +35°C...+75°C (XDIwin+F1, F1+ and F1+S)

Ta = -20°C ≤ Ta ≤ +35°C...+85°C (XDI+F1, F1+ and F1+S)





**CML 23ATEX1232X
Issue 0**

11 Description

The gas sensor types XDI+F1 & XDIwin+F1, XDI+F1+ & XDIwin+F1+ and XDI+F1+S & XDIwin+F1+S consist of sensing head type GDS F1, F1+ and F1+S respectively and instrument housing type XD-I or XD-Iwin. Inside of the instrument housing are PCB boards and display electronics (type XDIwin+F1, F1+ and F1+S only). The instrument housing is equipped with two threaded entries for the installation of appropriate Ex equipment certified cable glands.

Gas detector type XDIwin+F1, F1+ and F1+S can be used in ambient temperatures up to +75°C. Gas detector type XDI+F1 can be used up to 85°C. Ambient temperatures ranges and appropriate temperature class/maximum surface temperature are given in specific conditions of use.

Notes:

- FTZU 06ATEX0296X, Issue 3 is superseded by this certificate.
- The product covered by Issue 0 of this certificate remains identical to that previously covered by FTZU 06ATEX0296X, Issue 3.
- This certificate does not include the performance tests according to IEC 60079-29-1.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	22 Aug 2023	R16472A/00	Issue of prime certificate

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

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.
- The manufacturer shall specify VMQ rubber O-ring for Limatherm XDI/XDI-win enclosures (FTZU 03 ATEX 0207U). Other materials are not permitted.

14 Specific Conditions of Use (Special Conditions)

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

- The measuring performance of the equipment has not been verified. The equipment has been assessed for safety against the listed standards only.
- Gas detector type XDIWin+F1/F1+/F1+S:
 - Tamb -20°C to +35°C Temperature class/maximum surface temperature T6/T85°C
 - Tamb -20°C to +50°C Temperature class/maximum surface temperature T5/T100°C
 - Tamb -20°C to +75°C Temperature class/maximum surface temperature T4/T135°C



CML 23ATEX1232X
Issue 0

Gas detector type XDI+F1/F1+/F1+S:

Tamb -20°C to +35°C Temperature class/maximum surface temperature T6/T85°C
Tamb -20°C to +50°C Temperature class/maximum surface temperature T5/T100°C
Tamb -20°C to +85°C Temperature class/maximum surface temperature T4/T135°C

- iii. The flameproof joints of this equipment are other than the minimums specified in EN 60079-1 and shall not be repaired by the user.

Certificate Annex

Certificate Number CML 23ATEX1232X
Equipment XDI+F1, XDIwin+F1, XDI+F1+, XDIwin+F1+ and XDI+F1+S,
XDIwin+F1+S
Manufacturer GDS Technologies Ltd



The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
213.M.1.C	1 of 1	C	22 Aug 2023	XDIwin+F1/F1+/F1+S – General Arrangement
215.M.1.C	1 of 1	C	22 Aug 2023	XDI+F1/F1+/F1+S – General Arrangement
213.M.2.C	1 of 1	B	22 Aug 2023	XDI-XDIwin+F1/F1+/F1+S – Label Mounting
213.M.3.C	1 of 1	Jv1	22 Aug 2023	XDI-XDIwin+F1/F1+/F1+S – Label Detail