



EU - Type Examination Certificate

- (1) **EU - Type Examination Certificate**
- (2) **Component Intended for use on/in an Equipment or Protective System
Intended for use in Potentially Explosive Atmospheres
(Directive 2014/34/EU)**

(3) EU - Type Examination Certificate number:

FTZÚ 21 ATEX 0016U

- (4) Product: **Flameproof universal instrument housing type XD-FI, XD-FIwin, XD-FILwin,
XD-FIH, XD-FIHwin**
- (5) Manufacturer: **LIMATHERM S.A.**
- (6) Address: **ul. Tarnowska 1; 34-600 Limanowa; Poland**

- (7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) The Physical-Technical Testing Institute, Notified Body number 1026, in accordance with Articles 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014, 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 Annex II to the Directive.

The examination and test results are recorded in confidential Report number:

21/0016 dated 16.12.2021

- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-31:2014
- (10) The sign „U” is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.
- (11) This EU - Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- (12) The marking of the product shall include the following:



**II 2G Ex db IIC Gb
II 2D Ex tb IIIC Db**

This certificate is valid till: **31.12.2026**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 17.12.2021

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Physical-Technical Testing Institute
Ostrava - Radvanice

(13)

Schedule

(14) **EU - Type Examination Certificate No. FTZÚ 21 ATEX 0016U**

(15) Description of Product:

The product is empty instrument enclosure and it is certified as an Ex component.

The XD-FI series are designed to accommodate various electronic instruments for working in hazardous areas with flammable gases, vapours and dusts.

The body and covers are made of aluminium pressure die-casting (Mg<6%). The covers are fixed to the body by thread M100x2. The covers are sealed by "O" ring made of oil proof or silicon and FKM rubber.

The covers are locked by hex socketed screw. The cover of instrument enclosure is alternatively designed with cemented inspection window made of floated glass with thickness 10mm (XD-FIwin, XD-FILwin) and 15 mm (XD-FIHwin). An earth terminal is placed in and on the body of enclosure.

The threaded hole D1 is for processing connection M20x1.5, M24x1.5, M25x1.5, M27x2, 1/2"NPTmod, 3/4"NPTmod.

The threaded hole D5, D4 D3, D2 for flameproof cable gland M20x1,5, M24x1,5, M25x1,5, 1/2"NPTmod or 3/4"NPTmod are prepared on the body of enclosure.

The enclosure is coated by chemically resistant epoxy or polyurethane paint.

(16) Report Number: 21/0016

(17) Schedule of Limitations:

1. Service temperature range for type of housing and used sealing ring:

-40°C to +100°C for XD-FI; XD-FIH (O-ring TPE)

-60°C to +150°C for XD-FI; XD-FIH (O-ring VMQ)

-20°C to +200°C for XD-FI; XD-FIH (O-ring FKM)

-40°C to +100°C for XD-FIwin; XD-FILwin; XD-FIHwin (O-ring TPE)

-50°C to +100°C for XD-FIwin; XD-FILwin; XD-FIHwin (O-ring VMQ)

-20°C to +100°C for XD-FIwin; XD-FILwin; XD-FIHwin (O-ring FKM).

2. The empty enclosure is applicable for electrical apparatus, designed for ambient temperature not exceeding following range:

a) XD-FI; XD-FIH from -60°C to +200°C;

b) XD-FIwin; XD-FILwin; XD-FIHwin from -50°C to +100°C.

3. Max. numbers of holes, their size and position are given in Application manual. N-L4405.

4. Devices installed inside of enclosure can have any lay-out, which ensures, that in any cross-section area will be least 40% (group IIC) of area free.

5. For information on the dimensions of the flameproof joints the manufacturer shall be contacted.

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(14) **EU - Type Examination Certificate No. FTZÚ 21 ATEX 0016U**

(17) Schedule of Limitations (continuation):

6. Appropriate certify cable glands and blanking elements for direct entry have to be used.
7. The overpressure static test values:
 - XD-FI – 80 bars (the routine tests is not necessary to do);
 - XD-FIHwin – 80 bars (3x reference pressure – see EN 60079-1:2014, cl.16.6);
 - XD-FIwin; XD-FILwin – 65 bars (the routine tests is not necessary to do);
 - XD-FIH – 39 bars (1,5x reference pressure).
8. The empty enclosure must be installed to avoid a risk from propagating brush discharges for application in explosive dust atmosphere.
9. It is not allowed to install circuit breaker or contactors with oil filling and rotating apparatus producing turbulence inside of the enclosure.

(18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (9) of this certificate.

(19) Drawings and Documents:

Number	Sheets	Date	Description
N-L4405	6	04.02.2021	Application manual
--	3	04.02.2021	Data sheet XD-FI
1-Z-L4423	1	05.10.2020	Drawing XD-FI
1-Z-L4424	1	09.10.2020	Drawing XD-FIwin
1-Z-L4425	1	16.10.2020	Drawing XD-FILwin
1-Z-L4426	1	16.10.2020	Drawing XD-FIH
1-Z-L4427	1	19.10.2020	Drawing XD-FIHwin

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