



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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEX FTZU 21.0002U** Page 1 of 3 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: **2021-12-17**
Applicant: **LIMATHERM S.A.**
ul. Tarnowska 1
Limanowa 34-600
Poland
Ex Component: **Flameproof universal instrument housing type XD-FI, XD-FIwin, XD-FILwin, XD-FIH, XD-FIHwin**
This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).
Type of Protection: **flameproof enclosure "d", dust protection "t"**
Marking: **Ex db IIC Gb**
Ex tb IIIC Db

Approved for issue on behalf of the IECEX
Certification Body:

Dipl. Ing. Lukáš Martinák

Position:

Head of the Certification Body

Signature:
(for printed version)

Lukáš Martinák
2021-12-17



Date:

1. This certificate and schedule may only be reproduced in full.
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:

Fyzikálně technický zkušební ústav
(Physical -Technical Testing Institute)
Pikartska 7, 71607 Ostrava - Radvanice
Czech Republic





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Manufacturer: **LIMATHERM S.A.**
ul. Tarnowska 1
Limanowa 34-600
Poland

Additional
manufacturing
locations:

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 60079-1:2014-06 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:

[CZ/FTZU/ExTR21.0002/00](#)

Quality Assessment Report:

[CZ/FTZU/QAR11.0004/08](#)





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Ex Component(s) covered by this certificate is described below:

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 socked screw. The cover of instrument enclosure is alternatively designed with inspection window made of floated glass with thickness 10mm (XD-FIwin, FILwin) and 15mm (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.

The instruction for use see Application manual N-L4405 dated 04.02.2021.

SCHEDULE OF LIMITATIONS:

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

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

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

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

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

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

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

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

a) -60°C to +200°C for XD-FI and XD-FIH.

b) -50°C to +100°C for XD-FIwin and XD-FILwin and XD-FIHwin .

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

4. Devices installed inside of empty 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.

6. Appropriate certified cable glands and blanking elements for direct entry have to be used.

7. The overpressure static test parameters:

For XD-FI - 80 bars (the routine tests is not necessary to carry out).

For XD-FIHwin - 80 bars (3x reference pressure – see IEC 60079-1:2014, cl. 16.6).

For XD-FIwin and XD-FILwin - 65 bars (the routine tests are not necessary to carry out).

For XD-FIH - 39 bars (1.5x reference pressure).

8. The empty enclosure shall 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 empty enclosure.

