



# 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](http://www.iecex.com)

### Ex COMPONENT CERTIFICATE

Certificate No.:	<b>IECEX FTZU 12.0017U</b>	Page 1 of 4	<u>Certificate history:</u>
Status:	<b>Current</b>	Issue No: 2	Issue 1 (2016-08-31) Issue 0 (2012-11-05)
Date of Issue:	2022-02-25		
Applicant:	<b>Limatherm S.A.</b> ul. Tarnowska 1 34-600 Limanowa <b>Poland</b>		
Ex Component:	Universal instrument housing type XD-I, XD-lwin, XD- llwin, XD-IH, XD-IHwin, XD-IC, XD-ICwin, XD-ICLwin, XD-ICH, XD-ICHwin, XD-IP, XD-ICP		
<i>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).</i>			
Type of Protection:	<b>flameproof enclosure "d", protection by enclosure "t"</b>		
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 Certification Body**

Signature:  
(for printed version)

  
2022-02-25



Date:  
(for printed version)

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2. This certificate is not transferable and remains the property of the issuing body.
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Certificate issued by:

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





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Manufacturer: **Limatherm S.A.**  
ul. Tarnowska 1  
34-600 Limanowa  
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 component 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 component listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[CZ/FTZU/ExTR12.0017/00](#)

[CZ/FTZU/ExTR12.0017/01](#)

[CZ/FTZU/ExTR12.0017/02](#)

Quality Assessment Report:

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





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

Universal instrument housing type XD-I, XD-Iwin, XD-ILwin, XD-IH, XD-IHwin, XD-IC, XD-ICwin, XD-ICLwin, XD-ICH, XD-ICHwin, XD-IP, XD-ICP is foreseen to accommodate different electronics devices for working in hazardous areas with flammable gases, vapours and dusts.

The enclosure and cover are made of aluminium pressure die-casting (Mg<6%).

The cover is fixed to the body by thread M100x2. The cover is sealed by "O" ring ELASTOSIL R701/50 (VMQ) or Fluorelastomer VR1 (FKM) or Tefablock TO SI 431 60A (TPE).

The cover is locked by screw with hex socket using hex spanner.

The cover is alternatively designed with inspection window made of floated glass.

An earth terminal is placed 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 D2, D3, for flameproof cable gland M20x1.5, M24x1.5, M25x1.5, 1/2"NPTmod or 3/4"NPTmod are prepared on the body of enclosure.

Rated service temperature range (°C) for Ex Components: See Schedule of limitations

The instruction for use see Application manual N-L2237 dated 26.11.2020.

## SCHEDULE OF LIMITATIONS:

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

-40°C to +100°C for XD-I; XD-IH; XD-IC; XD-ICH; XD-IP; XD-ICP (O-ring TPE)

-40°C to +100°C for XD-I; XD-IH; XD-IC; XD-ICH (O-ring VMQ)

-60°C to +150°C for XD-IP; XD-ICP (O-ring VMQ)

-20°C to +200°C for XD-I; XD-IH; XD-IC; XD-ICH; XD-IP; XD-ICP (O-ring FKM)

-40°C to +85°C for XD-Iwin; XD-ILwin; XD-IHwin; XD-ICwin; XD-ICLwin; XD-ICHwin (O-ring TPE and VMQ)

-20°C to +85°C for XD-Iwin; XD-ILwin; XD-IHwin; XD-ICwin; XD-ICLwin; XD-ICHwin (O-ring FKM)

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

a) XD-I; XD-IH; XD-IC; XD-ICH; XD-IP; XD-ICP from -60°C to +200°C;

b) XD-Iwin; XD-ILwin; XD-IHwin; XD-ICwin; XD-ICLwin; XD-ICHwin from -40°C to +85°C.

3. Max. numbers of holes, their size and position are given in Application manual N-L2237.

4. Apparatus 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.

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

7. The max. overpressure static test: 50 bars; for new variants of housing XD-IP and XD-ICP (aluminium material AISi8MgMnTiVZrNi(Fe)): 90 bar and XD-IP and XD-ICP (made of standard aluminium alloy): 80 bar. The maximum value of reference pressure of new variants – 13.98 bars.

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.





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## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 2:

1. Addition of the new variants of housing XD-IP and XD-ICP (made of standard aluminium alloy and a new aluminium material AlSi8MgMnTiVZrNi(Fe) intended for Ts range from -60°C to 150°C with used o-ring type VMQ rubber.
2. Upgrade to the latest edition of standard IEC 60079-0:2011, 7th Edition.
3. The Schedule of Limitations has been updated.

