



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx FTZU 10.0010U

Issue No: 2

Certificate history:

Issue No. 2 (2014-09-09)

Status: Current

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Issue No. 1 (2011-11-04)

Issue No. 0 (2010-04-27)

Date of Issue: 2014-09-09

Applicant: LIMATHERM, S.A.  
ul. Tarnowska 1  
34-600 Limanowa  
Poland

Electrical Apparatus: Universal instrument housing XD-SI; XD-SIwIn, XD-SILwIn  
Optional accessory:

Type of Protection: Flameproof enclosure, dust protected enclosure

Marking: Ex dI Mb  
Ex d 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)

Date:

*Jaroslav*

2014-09-09



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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Fyzikálně technický zkusební 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  
location(s):

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 electrical apparatus 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*This Certificate does not indicate compliance with electrical 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/ExTR10.0010/00

### Quality Assessment Report:

~~NL/KEM/QAR06.0018/02~~  
CZ/FTZU/QAR11.0004/01







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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The universal instrument housing XD-SI...series is designed to accommodate different electronics instruments or devices for working in hazardous areas with flammable gases, vapours and dusts. The housing and cover are made as stainless steel investment casting. XD-SIwin; XD-SILwin -enclosure is alternatively designed with the cover with a window.

There are three flameproof joints in XD-SI instrument body:

- The thread M100x2/6H is used on the cover
- D1 on process opening for thermowell (D1 - various type of threaded holes)
- D2, D3 on the conduit openings for cable gland (various type of threaded holes)

The cover is locked by screw M4x8 with hex socket using hex spanner. Each cover is sealed with "O" ring.

The unused holes can be blinded with a certified stopping plug. The instruction for use see doc. N-L3625.

### Schedule of Limitations:

- T<sub>serv</sub> : -20°C to +200°C for XD-SI (fluoroelastomer rubber FKM)
- T<sub>serv</sub> : -20°C to +85°C for XD-SIwin; XD-SILwin (fluoroelastomer rubber FKM)
- T<sub>serv</sub> : -50°C to +150°C for XD-SI (silicone rubber)
- T<sub>serv</sub> : -50°C to +85°C for XD-SIwin; XD-SILwin (silicone rubber)

The application manual - see document N-L3625 updated 11.9.2012.

CONDITIONS OF CERTIFICATION: NO





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

### Changes of the component:

1. Change the thickness of circlip from 2 mm to 3 mm in types of housing with window;
2. Using only M and NPT threads for thread holes  $D_1$ ;  $D_2$ ;  $D_3$  and the length of NPT threads was changed from 13mm to 16,2mm;
3. Introducing new type of housing XD-SILwin;
4. Verification according to new standard IEC 60079-0:2011, 6<sup>th</sup> Edition and IEC 60079-31:2008 1<sup>st</sup> ed.
5. Change of marking: Ex d I Mb ; Ex d IIC Gb; Ex tb IIIC Db

### Annex:

[Attachment to the\\_FTZU\\_10.0010U02.pdf](#)

[Attachment to the\\_FTZU-10.0010\\_00.doc](#)







Manufacturer's Documents			
Title:	Drawing No.:	Rev. Level:	Date:
Application manual	N-L3625		11.09.2012
Data sheet	XD-SI		11.09.2012
XD-SI	2-Z-L3586	rev.c	09.02.2012
XD-SIwin	2-Z-L4029	rev.b	09.02.2012
XD-SILwin	2-Z-L4266		08.11.2012

**Special conditions:****1) Max. dissipation power for temperature class are as follow:**

Max. power dissipation (W)				
T <sub>amb</sub>	Temperature class T6 85°C	Pztr (W)	Temperature class T5 100°C	Pztr (W)
		For all variety of enclosures position horizontally/vertically		For all variety of enclosures position horizontally/vertically
40°C	$\Delta 0 \leq 40$ K	20,0 / 15,0	$\Delta 0 \leq 55$ K	29,0 / 24,0
55°C	$\Delta 0 \leq 25$ K	11,0 / 8,5	$\Delta 0 \leq 40$ K	20,0 / 15,0
70°C	$\Delta 0 \leq 10$ K	3,6 / 3,1	$\Delta 0 \leq 25$ K	11,0 / 8,5
85°C	N.A.	--	$\Delta 0 \leq 10$ K	3,6 / 3,1

- 2) IP protection 66 – 68 is depend on applied cable gland (max.IP 68 / deep =1 m);
- 3) Max.number, size and position of apertures – see - documentation;
- 4) The enclosure with Ex component certificate shall be applicated only by assumption of filling requests of the standard IEC 60079-1:2009 cl.D.3.10;
- 5) The type static pressure test (four times the reference pressure):
  - type XD- SI; XD-SIwin – 41 bar;
  - type XD-SILwin – 34 bar.

