



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

Certificate No.: IECEx FTZU 17.0008U Issue No: 0 Certificate history:
Issue No. 0 (2017-02-27)

Status: **Current** Page 1 of 4

Date of Issue: **2017-02-27**

Applicant: **Limatherm Components Sp. z o.o**
ul. Żelazna 5
41-506 Chorzów
Poland

Equipment: **Empty instrument enclosure - Connection head type XD – S** series and Field transmitter housing XD – S**F...**

Optional accessory:

Type of Protection: **flameproof enclosure, enclosure with dust protection**

Marking:
Ex db I Mb
Ex db IIC Gb
Ex tb III C Db

Approved for issue on behalf of the IECEx
Certification Body:

Dipl. Ing. Lukáš Martinák

Position:

Head of Certification Body

Signature:
(for printed version)

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

Certificate issued by:

**Fyzikálne technický zkusební ústav
(Physical -Technical Testing Institute)
Pikartská 7, 71607 Ostrava - Radvanice
Czech Republic**





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Manufacturer: **Limatherm Components Sp. z o.o**
ul. Żelazna 5
41-506 Chorzów
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 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	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/ExTR17.0008/00](#)

Quality Assessment Report:

[CZ/FTZU/QAR14.0004/02](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

General product information:

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

The product is designed to accommodate various electronic instruments for working in hazardous areas with flammable gases, vapours and dusts.

The housing and cover are made from stainless steel investment casting. The cover is sealed by sealing O-ring. The cover can be equipped by glass window and it is marked with 'win' behind the type marking.

There are three flameproof joints in the product type XD-S** series connection head (there are only first two flameproof joints applied for type XD-S**F... field transmitter housing):

1) The cover is fixed to the housing by threaded joint M80x1.5 6H.

2) The threaded holes for cable glands on the housing D2, D3: M20×1.5, 1/2NPTmod, 3/4NPTmod.

3) The cylindrical joint d1:

Ø6.0 (+0.04, -0.05), Ø6.1 H8, Ø8.1 H8, Ø8.0 (+0.1, +0.02), Ø9.6 H8, Ø10.1 H7, Ø10.0 (+0.1, +0.02), Ø12.1 H7, Ø12.8 H7, Ø15.1 H7

or

Ø13 is made for non flameproof joint sensor wires or

M16x1.5 6g is made for creating flameproof joints with screw bushing.

The threaded hole D1: M20×1.5, M24×1.5, M27×2, 1/2NPTmod, 3/4NPT mod, Rc1/2, Rc3/4, BSPT1/2, BSPT 3/4, G 1/2, G3/4, G 3/8, BSPP1/2, BSPP 3/4, BSPP3/8 is designed for process opening.

The taper NPT threads according to ANSI/ASME B1.20.1-1983 is executed with modification to meet simultaneously standards IEC 60079-1, EN 60079-1, CSA C22.2 No.5 and FM 3615.

See Application manual dated 05.12.2016

SPECIFIC CONDITIONS OF USE: NO



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EQUIPMENT (continued):

Schedule of Limitations:

1. Max.number, size and position of apertures – are given in Application manual dated 5.12.2016.
2. For information on the dimensions of the flameproof joints the manufacturer shall be contacted.
3. The enclosure with Ex component certificate shall be applicated only by assumption of filling requests of the standard IEC 60079-1, cl.D.3.10.
4. Appropriate certify cable glands for direct entry has to be used.
5. The process threaded joint D1 shall be verified according to EN 60079-31,cl. 5.1.2 for final installation as equipment.
6. $-50^{\circ}\text{C} \leq T_{\text{serv}} \leq +150^{\circ}\text{C}$ for "O" ring made from VQM rubber (silicone)
 $-25^{\circ}\text{C} \leq T_{\text{serv}} \leq +200^{\circ}\text{C}$ for "O" ring made from fluoroelastomer FKM
 $-50^{\circ}\text{C} \leq T_{\text{serv}} \leq +85^{\circ}\text{C}$ for XD-S**win with VQM rubber
 $-25^{\circ}\text{C} \leq T_{\text{serv}} \leq +85^{\circ}\text{C}$ for XD-S**win with FKM rubber
7. Maximum power dissipation – see Annex

Annex:

[Annex to the_IECEx_FTZU_17_0008_00.pdf](#)



Max. power dissipation (W)						
T _{amb}	Temperature class T6 85°C	P (W)		P (W)		
		For all variety of enclosures position horizontally/vertically		Temperature class T5 100°C	For all variety of enclosures position horizontally/vertically	
40°C	$\Delta T \leq 40$ K	8.0 / 9.0		$\Delta T \leq 55$ K	12.0 / 13.0	
55°C	$\Delta T \leq 25$ K	4.3 / 4.7		$\Delta T \leq 40$ K	8.0 / 9.0	
70°C	$\Delta T \leq 10$ K	1.4 / 1.45		$\Delta T \leq 25$ K	4.3 / 4.7	
85°C	N.A.	--		$\Delta T \leq 10$ K	1.4 / 1.45	

Notice: Max. admissible temperature is always 5°C lower than the temperature of temperature class.