



IECEX TEST REPORT COVER

ExTR Reference Number.....	CZ/ FTZU/ExTR 14.0003/04	
ExTR Free Reference Number	14 IECEx 0003/04	
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Date of issue	01.02.2021	
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Address	Pikartská 1337/7, 716 07 Ostrava-Radvanice, Czech Republic	
Ex Certification Body (ExCB).....	Physical Technical Testing Institute, s.p	
Address	Pikartská 1337/7, 716 07 Ostrava-Radvanice, Czech Republic	
Applicant's name.....	Limatherm Components Sp. z o.o	
Address	ul. Źelazna 5, 41-506 Chorzów , Poland	
Standards associated with this ExTR package	IEC 60079-0:2017, 7 th Edition IEC 60079-1:2014, 7 th Edition; IEC 60079-31:2013, 2 nd Edition	
Clauses considered	All clauses considered	
Related Amendments, Corrigenda or ISHs	<u>IEC 60079-0:2017/COR1:2020</u> <u>IEC 60079-0:2017/ISH2:2019</u> <u>IEC 60079-0:2017/ISH1:2019</u>	
Test item description	Instrument housing	
Model/type reference	Connection head type XD – A** series Field transmitter housing XD – A**F... series	
Code (e.g. Ex _ II_ T_).....	Ex db IIC Gb Ex tb IIIC Db	
Rating.....	Maximum power dissipation [W] – see Annex to certificate No. IECEx/FTZU 14.0003/04	

ExTR Package Contents

Assembled ExTR documents and Additional reference material:

IECEX Test Report Cover

IECEX Test Report: IEC 60079-0, Edition 7th

IECEX Test Report: IEC 60079-1, Edition 7th

IECEX Test Report IEC 60079-31, Edition 2nd

Manufacturer's name	Limatherm Components Sp. z o.o
Address	ul. Źelazna 5, 41-506 Chorzów , Poland
Trademark	Limatherm Components Sp. z o.o
Certificate No. (optional)	NA
QAR Reference No. (optional)	CZ/FTZU/QAR14.0004/06
Particulars: Test item vs. Test requirements	
Classification of installation and use	Stationary
Ingress protection	IP 68 max (h=1m)
Rated ambient temperature range (°C).....	-----
Rated service temperature range (°C) for Ex Components	<u>XD-A.. series:</u> -40°C to +100°C (TPE rubber) -50°C to +150°C (VMQ rubber) -20°C to +200°C (FKM rubber) <u>XD-A...win series</u> -40°C to +85°C (TPE rubber) -50°C to +85°C (VMQ rubber) -20°C to +85°C (FKM rubber)
General remarks:	
The test results presented in this ExTR package relate only to the item or product tested.	
<ul style="list-style-type: none"> ▪ "(See Attachment #)" refers to additional information appended to the ExTR package. ▪ "(See appended table)" refers to a table appended to the ExTR package. ▪ Throughout this ExTR package, a point is used as the decimal separator. ▪ <i>Where the term "N/A" appears in any part of an ExTR package, it indicates that the associated issue was considered "Not applicable" to the involved evaluation.</i> ▪ <i>In accordance with IECEx 02, a Receiving ExCB may request a sample of the Ex equipment and copies of the documentation referred to in an ExTR Cover.</i> 	
The technical content of this ExTR package shall not be reproduced except in full without the written approval of the Issuing ExCB and ExTL.	
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 aluminium alloy 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-A** series connection head (there are only first two flameproof joints applied for type XD-A**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: M20x1.5, 1/2NPTmod, 3/4NPTmod.	
3) The cylindrical joint d1:	
O6.0 (+0.04, -0.05), O6.1 H8, O8.1 H8, O8.0 (+0.1, +0.02), O9.6 H8, O10.1 H7, O10.0 (+0.1, +0.02), O12.1 H7, O12.8 H7, O15.1 H7 or	
O13 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: M20x1.5, M24x1.5, M27x2, 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.

The cover is sealed by sealing O-ring.

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

The enclosure is coated by paint layer – thickness cannot exceed 0,2mm.

See Application manual No. N-L2236 dated 28.01.2021

Details of change (applicable only when revising an existing ExTR package):

- 1) Adding an optional alloy (EN AC-46000) and grounding type for all versions.
- 2) Modification of the “Schedule of Limitations.”
- 3) Upgrade to the latest editions of standards

Copy of Marking Plate:

LIMATHERM COMPONENTS, 41-506 CHORZÓW POLAND
1026 Ⓢ II 2G Ex db IIC Gb; II 2D Ex tb IIIC Db;
FTZU 03 ATEX 0074U
Ex db IIC Gb; Ex tb IIIC Db;
IECEX FTZU 14.0003U
Type: XD-AD

LIMATHERM COMPONENTS, 41-506 CHORZÓW POLAND
1026 Ⓢ II 2G Ex db IIC Gb; II 2D Ex tb IIIC Db;
FTZU 03 ATEX 0074U
Ex db IIC Gb; Ex tb IIIC Db;
IECEX FTZU 14.0003U
Type: XD-AB

LIMATHERM COMPONENTS, 41-506 CHORZÓW POLAND
1026 Ⓢ II 2G Ex db IIC Gb; II 2D Ex tb IIIC Db;
FTZU 03 ATEX 0074U
Ex db IIC Gb; Ex tb IIIC Db;
IECEX FTZU 14.0003U
Type: XD-ADwin

LIMATHERM COMPONENTS, 41-506 CHORZÓW POLAND
1026 Ⓢ II 2G Ex db IIC Gb; II 2D Ex tb IIIC Db;
FTZU 03 ATEX 0074U
Ex db IIC Gb; Ex tb IIIC Db;
IECEX FTZU 14.0003U
Type: XD-ADH

Details regarding ‘trade agent’ / ‘local assembler’ application in accordance with OD 203: NA

In accordance with OD 024, testing not fully performed by ExTL staff at the above ExTL address:NA

National differences considered as part of this evaluation: NA

“Schedule of Limitations”:

1. Maximum number of the holes, their sizes and position are specified in Application manual N-L2236 dated 28.01.2021.
2. It is not allowed to install circuit breaker or contactors with oil filling and rotating apparatus producing turbulence inside of the enclosure.
3. For information on the dimensions of the flameproof joints the manufacturer shall be contacted.
4. The empty enclosure is applicable for electrical apparatus, designed for ambient temperature not exceeding following range:
 - a) The connection head -50°C to +150°C – without window, -50°C to +85°C – with window,
 - b) The field transmitter housing: -50°C to +60°C with and without window.
5. The apparatus installed inside of the enclosure can have any layout, ensuring more than 40 % of free cross-section.
6. An appropriate certified cable glands for direct entry have to be used.
7. The process threaded joint D1 shall be verified according to IEC 60079-31, cl. 5.1.2 for final installation as equipment.
8. The component must be installed to avoid a risk from propagating brush discharges for application in explosive dust atmosphere.

Routine tests: Overpressure test acc. cl. 15.2.3.1 of the standard IEC 60079-1

It was carried out tests:

- 4 times reference pressure - at maximum water pressure 65 bar - no routine test is required

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Technical Documents			
Title:	Drawing. No:	Version:	Date:
Application manual	N-L2236	-	28.01.2021
XD-AD	2-Z-L1983	c	04.01.2021
XD-ADwin	2-Z-L2068	c	04.01.2021
XD-ADF	2-Z-L2186	c	04.01.2021
XD-ADFwin	2-Z-L2187	c	04.01.2021
XD-ADEH	2-Z-L2219	c	04.01.2021
XD-ADFEH	2-Z-L2221	c	04.01.2021
XD-ADH	2-Z-L3105	c	04.01.2021
XD-AH	2-Z-L3537	c	04.01.2021
XD-AB	2-Z-L3538	c	04.01.2021
XD-AHH	2-Z-L3539	c	04.01.2021
XD-ABH	2-Z-L3540	c	04.01.2021
XD-AHwin	2-Z-L3541	c	04.01.2021
XD-ABwin	2-Z-L3542	c	04.01.2021
XD-AHEH	2-Z-L3543	c	04.01.2021
XD-ABEH	2-Z-L3544	c	04.01.2021
XD-AHF	2-Z-L3548	c	04.01.2021
XD-ABF	2-Z-L3549	c	04.01.2021
XD-AHFH	2-Z-L3550	c	04.01.2021
XD-ABFH	2-Z-L3551	c	04.01.2021
XD-AHFwin	2-Z-L3552	c	04.01.2021
XD-ABFwin	2-Z-L3553	c	04.01.2021
XD-AHFEH	2-Z-L3554	c	04.01.2021
XD-ABFEH	2-Z-L3555	c	04.01.2021
XD-ADFH	2-Z-L3723	c	04.01.2021

*Note: An * is included before the title of documents that are new or revised.*

Evaluation

a) use for all variants of the alternative alloy (EN AC-46000) of flameproof enclosure:

- EN AC-46000 alloy – material composition is a similar and material strength resistance according to data sheets is the same. Other tests of mechanical endurance are unnecessary.

b) Alternative types of earthing consist only in preparation for the possibility of attaching the conductor for connection (only threaded hole M5 on the molding, which does not enter the fixed end - external and internal is only threaded hole M5 on the inner molding for installation of electrical elements. This modification does not affect the specified types of Ex db and Ex tb protections.

c) Specification of Schedule of limitations - updated according to new editions of standards.