



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

Ex COMPONENT CERTIFICATE

Certificate No.: IECEx KDB 13.0006U

Issue No: 2

Certificate history:

Status: **Current**

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Issue No. 2 (2018-11-30)

Date of Issue: **2018-11-30**

Issue No. 1 (2016-11-22)

Issue No. 0 (2013-04-15)

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

Ex Component: **Instrument housing type XD-S120, XD-S120win, XD-S120L, XD-S120Lwin**

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 by enclosure "t"**

Marking:

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

Approved for issue on behalf of the IECEx
Certification Body:

mgr inż. Piotr Madej

Position:

Head of ExCB

Signature:
(for printed version)

Date:

30.11.2018

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:

Główny Instytut Górnictwa, Kopalnia Doświadczalna "BARBARA"
(Central Mining Institute Experimental Mine "Barbara")
ul. Podleska 72
43-190 Mikołów
Poland





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Manufacturer: **Limathern 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 Component 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 Ex 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 Edition:7.0 | Explosive atmospheres - Part 0: Equipment - 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 Ex Component listed has successfully met the examination and test requirements as recorded in

Test Report:

PL/KDB/ExTR13.0004/00 PL/KDB/ExTR13.0004/01 PL/KDB/ExTR13.0004/02

Quality Assessment Report:

CZ/FTZU/QAR11.0004/00 CZ/FTZU/QAR11.0004/01 CZ/FTZU/QAR11.0004/02
CZ/FTZU/QAR11.0004/03 CZ/FTZU/QAR11.0004/04 CZ/FTZU/QAR11.0004/05



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Schedule

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

Universal instrument housings type XD-S120, XD-S120win, XD-S120L, XD-S120Lwin are designed to accommodate different electronic instruments or devices working in hazardous areas.

Instrument housings XD-S120, XD-S120L are made of stainless steel. The housing consists of a body and a cover. It is used O-ring rubber (VMQ - Elastosil R701/50 or FKM Fluoroelastomer VR1) to seal the joint. Two conduit holes (D2, D3) for cable gland and one process opening (D1) for sensor or thermowell are placed on the body of the device.

Instrument housings XD-S120win, XD-S120Lwin are made of stainless steel. The housing consists of a body and a cover with glass window. It is used O-ring rubber (VMQ - Elastosil R701/50 or FKM Fluoroelastomer VR1) to seal the joint. Two conduit holes (D2, D3) for cable gland and one process opening (D1) for sensor or thermowell are placed on the body of the device.

Location, number and destination of particular threaded entries and the parameters of corresponding flameproof joints are specified in the manual.

SCHEDULE OF LIMITATIONS:

- Universal instrument housings type XD-S120, XD-S120win, XD-S120L, XD-S120Lwin after equipped with the electrical components shall be evaluated in accordance to the procedures of the final certification;
- For some flameproof joints gaps are smaller and the width is larger than specified in EN 60079-1. The values of these gaps and widths are included in the instruction manual;
- The maximum service temperature of the window is 85°C;
- Requirements of service temperature for the o-rings are:
 - 85°C for housing type XD-S120win, XD-S120Lwin;
 - 150°C for housing type XD-S120, XD-S120L with o-ring VMQ rubber,
 - 200°C for housing type XD-S120, XD-S120L with o-ring FKM Fluoroelastomer VR1
- Rotating machines, or other devices which create turbulence, shall not be incorporated;
- Oil-filled circuit-breakers and contactors shall not be used;
- The content of the Ex component enclosure equipment may be placed in any arrangement provided that an area of at least 40% (group IIC) or 20% (group I) of each cross-sectional area remains free. Separate relief areas may be aggregated provided that each area has a minimum dimension in any direction of 12,5mm;



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DETAILS OF CERTIFICATE CHANGES (for Issues 1 and above):

Versions of the universal instrument housing XD-S120L and XD-S120Lwin have been implemented.

Annex:

[CoC_KDB_13_0006U_02_Attachment.pdf](#)



Data Sheet

Manufacturer: Limatherm S.A.
ul. Tarnowska 1
34-600 Limanowa, Poland

Equipment: Universal instrument housing
type XD-S120, XD-S120win, XD-S120L, XD-S120Lwin

Technical parameters:

| | | |
|---------------------|---|-------------------|
| Version | XD-S120 | |
| Overall dimensions | 167mm x 146mm x 127mm | |
| Version | XD-S120L | |
| Overall dimensions | 167mm x 146mm x 114mm | |
| Ingress protection | IP54 - not applicable for group IIIC IP66/IP67 | |
| Service temperature | O-ring VMQ rubber | O-ring FKM rubber |
| | -50°C ÷ 150°C | -20°C ÷ 200°C |

| | | |
|---------------------|---|-------------------|
| Version | XD-S120win | |
| Overall dimensions | 167mm x 146mm x 143,5mm | |
| Version | XD-S120Lwin | |
| Overall dimensions | 167mm x 146mm x 114mm | |
| Ingress protection | IP54 - not applicable for group IIIC IP66/IP67 | |
| Service temperature | O-ring VMQ rubber | O-ring FKM rubber |
| | -50°C ÷ 85°C | -20°C ÷ 85°C |