CERTIFICATE OF CONFORMITY

1. **HAZARDOUS (CLASSIFIED) LOCATION COMPONENT PER US REQUIREMENTS**
2. **Certificate No:** **FM18US0036U**
3. **Component: (Type Reference and Name)** **XD-I, XD-Iwin, XD-ILwin, XD-IC, XD-ICwin XD-ICLwin and XD-SI Series Universal instrument Housings**
4. **Name of Listing Company:** **Limatherm SA**
5. **Address of Listing Company:** **Ul. Tarnowska 1**
   34-600 Limanowa
   Poland
6. The examination and test results are recorded in confidential report number:

   3019264 dated 24th November 2004

7. FM Approvals LLC, certifies that the component described has been found to comply with the following Approval standards and other documents:

   FM Class 3600:2018, FM Class 3615:2018, FM Class 3810:2017,
   ANSI/ISA 60079-0:2013, ANSI/UL 60079-1:2015, ANSI/NEMA 250:1991, ANSI/IEC 60529:2004

8. The sign 'U' placed after the certificate number indicates that this certificate must not be mistaken for a certificate for equipment or a protective system. This certificate may only be used as the basis for the certification of equipment or a protective system. This certificate is issued to the manufacturer also intended to be the holder of the equipment certificate which includes this component.

9. This certificate relates to the design, examination and testing of the component specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the component as examined, tested and Approved.

Certificate issued by:

J.E. Marquedant
VP, Manager, Electrical Systems

23 February 2018
Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

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SCHEDULE

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10. Component Ratings:

XD-I, XD-Iwin, XD-ILwin, XD-IC, XD-ICwin and XD-ICLwin. Universal instrument Housings.
Explosionproof for Class I, Division 1, Groups A, B, C and D; Dust-Ignitionproof for Class II,III, Division 1, Groups E, F and G; and Flameproof for Class I, Zone 1, AEx db IIC hazardous (classified) locations, indoors and outdoors (Type 4X and IP66).

***XD-SI Universal Instrument Housing*.**
Explosionproof for Class I, Division 1, Groups A, B, C and D; Dust-Ignitionproof for Class II,III, Division 1, Groups E, F and G hazardous (classified) locations, indoors and outdoors (Type 4X).

11. The marking of the component shall include:

XD-I, XD-Iwin, XD-ILwin, XD-IC, XD-ICwin and XD-ICLwin. Universal instrument Housings.
Class I Division 1, Groups A, B, C, D, T6; Type 4X, IP66
Class II, Division 1, Groups E, F, G, Class III, Division 1, T6; Type 4X, IP66
Class I, Zone 1, AEx db IIC, T6; Type 4X, IP66

***XD-SI Universal Instrument Housing*.**
Class I Division 1, Groups A, B, C, D; Type 4X
Class II, Division 1, Groups E, F, G, Class III, Division 1; Type 4X

12. **Description of Equipment:**

General - The XD-I, XD-IC and XD-SI Series Instrument Housings consist of an assembly of a threaded cover and base. The XD-I, XD-IC and XD-SI enclosures have a solid cover, while the XD-I/IC/SIwin and XD-IL/ICL/SILwin all have a window cover. The XD-IL/ICL/SILwin Series contain an extended length cover. The window covers have a cemented flamepath between the window and the cover.

Construction - The window cover includes a glass lens, a retaining ring, and Sylgard 567 silicone cement. The cover and the base are constructed of aluminum alloy for the XD-I and XD-IC housings and 316 stainless steel for the XD-SI housing. The base has three conduit openings that are either M20x1.5, M24x1.5, M25x1.5, M27x2, ½-14 NPT or ¾-14 NPT for United States and ½-14 NPT or ¾-14 NPT for Canadian certification.

XD-I, XD-Iwin, XD-ILwin, XD-IC, XD-ICwin and XD-ICLwin. Universal instrument Housings.

XD-SIabcd Universal Instrument Housings.
a = Instrument cover: blank, win or Lwin.
b = Material of seal: 4 or 5
c = Symbol of conduit thread: M2, N2, N3, M24, M25 or PD.
d = Symbol of process thread: M25, N2, N3, M2, M24, M27 or PD.

13. **Schedule of Limitations:**

XD-I, XD-Iwin, XD-ILwin, XD-IC, XD-ICwin and XD-ICLwin. Universal instrument Housings.

SCHEDULE

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1. The flamepaths of the equipment are not intended to be repaired. Consult the manufacturer if repair of the flamepath joints is necessary.
2. Potential electrostatic charging hazard – cleaning of enclosure surfaces should be done with damp cloth.
3. *Temperature Range*
   - *-40°C to +85°C for enclosure incorporating a display window in the enclosure cover.*
   - *-40°C to +100°C for enclosure with a solid cover (no display window).*
4. *For application as part of flameproof "db" equipment, the following additional limitations shall be observed:*
   - *Rotating machines, or other devices which create turbulence, shall not be incorporated*
   - *Oil-filled circuit-breakers and contactors shall not be used;*
   - *The contents of the XD-I and XD-IC Series Ex component enclosures 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 to permit unimpeded gas flow and, therefore, unrestricted development of an explosion. Separate relief areas may be aggregated provided that each area has a minimum dimension in any direction of 12.5 mm.*

XD-Slabcd Universal Instrument Housings.

1. For XD-SI Series Housings the ambient temperature range for the instrument housings is -50°C to +150°C when equipped with blind covers and VQM rubber O-ring and -20°C to +200°C when equipped with blind covers and FKM rubber O-ring. For housings with window covers, ambient temperature range is -50°C to +85°C with VQM rubber O-ring and -20°C to +85°C with FKM rubber O-ring.

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
24th November 2004	Original Issue.
23rd February 2018	Supplement 5: Report Reference: – RR212656 dated 23rd February 2018 Description of the Change: Addition on new XD-IC housing model and update to current standards.