Physical-Technical Testing Institute
Ostrava - Radvanice

(1) Supplementary EU - Type Examination Certificate No.8

(2) **Component Intended for use on/in an Equipment or Protective System Intended for use in Potentially Explosive Atmospheres (Directive 2014/34/EU)**

(3) EU - Type Examination Certificate number:

FTZÚ 03 ATEX 0207U

(4) Product: **Instrument housing type XD-I, XD-Iwin, XD- ILwin, XD-IH, XD-IHwin, XD-IC, XD-ICwin, XD-ICLwin, XD-ICH, XD-ICHwin**

(5) Manufacturer: **Limatherm S.A.**

(6) Address: **ul. Tarnowska 1, 34-600 Limanowa, Poland**

(7) This supplementary certificate extends EC - Type Examination Certificate No. FTZÚ 03 ATEX 0207X to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

(8) The Physical-Technical Testing Institute, Notified Body number 1026, in accordance with Articles 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014, certifies that this product, as modified by this supplementary certificate, has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

(9) In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20.04.2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20.04.2016.

(10) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012, EN 60079-1:2014, EN 60079-31:2014

(11) The marking of the product shall include the following:

II 2G Ex db IIC Gb

II 2D Ex tb IIIC Db

(12) This certificate is valid till: **31.08.2021**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex AO 210 NB 1026

Date of issue: 31.08.2016

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
tel +420 595 223 111, fax +420 596 232 672, ftzu@ftzu.cz, www.ftzu.cz

(13) **Schedule**

(14) # Supplementary EU - Type Examination Certificate No. 8 to FTZÚ 03 ATEX 0207U

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Modification of certified apparatus;
- Evaluation according to the new edition of the standards EN 60079-0:2012, EN 60079-1:2014 and EN 60079-31:2014;
- Prolongation of certificate validity.

This supplementary certificate modifies following changes:

- increase wall thickness of base bottom to 6mm;
- removal of wall between D2 and D3 entries; for 3/4 NPTmod hole under thread increased to Ø18mm;
- increase circlip thickness to 3mm;
- addition new variants of housing without lugs: XD-IC, XD-ICwin, XD-ICLwim, XD-ICH and XD-ICHwin.

(16) Report Number.: 03/0207/8

(17) Schedule of Limitations:

1. Tserv according to use seal:
   TPE: -40÷100/85°C – lower temperature for housing with sight glass
   VMQ: -40÷100/85°C – lower temperature for housing with sight glass
   FKM: -20÷200/85°C – lower temperature for housing with sight glass
2. Max. number, size and position of apertures – are given in Application manual N-L2237 dated 31.03.2016;
3. For information on the dimensions of the flameproof joints the manufacturer shall be contacted;
4. Apparatus installed inside of enclosure can has any lay-out, which ensures, that in any cross-section area will be least 40% (group IIC) of area free;
5. The enclosure with Ex component certificate can be applicate only by assumption of filling requests of the standard EN 60079-1:2014, cl.D.3.10;
6. Appropriate certify cable glands for direct entry has to be used;
7. IP 68 max (h=1m).
8. The max. overpressure static test of housing: 50 bar / 10 s.

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

Date of issue: 31.08.2016

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
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(13) **Schedule**

(14) # Supplementary EU - Type Examination Certificate No. 8 to FTZÚ 03 ATEX 0207U

9. Max. power dissipation for temperature class:

Max. power dissipation (W)				
T_{amb}	**Temperature class T6 85°C**	P (W) For all variety of enclosures position horizontally/vertically	**Temperature class T5 100°C**	P (W) For all variety of enclosures position horizontally/vertically
40°C	Δ T ≤40 K	26,0 / 20,0	Δ T ≤55 K	38,0 / 33,0
55°C	Δ T ≤25 K	15,0 / 11,0	Δ T ≤40 K	26,0 / 20,0
70°C	Δ T ≤10 K	5,0 / 4,0	Δ T ≤25 K	15,0 / 11,0
85°C	N.A.	--	Δ T ≤10 K	5,0 / 4,0

(18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (10) of this supplementary certificate.

(19) Drawings and Documents:

Number	Sheets	Revision	Date	Description
N-L2237	7		31.03.2016	Application manual
			31.03.2016	Data sheet XD-I
2-Z-L2213		d	25.04.2016	XD-I
2-Z-L2214		d	25.04.2016	XD-Iwin
2-Z-L3218		d	25.04.2016	XD-H
2-Z-L3219		d	25.04.2016	XD-IHwin
2-Z-L3224		d	25.04.2016	XD-ILwin
2-Z-L4278			25.04.2016	XD-IC
2-Z-L4279			25.04.2016	XD-ICwin
2-Z-L4351			25.04.2016	XD-ICLwin
2-Z-L4352			25.04.2016	XD-ICH
2-Z-L4353			25.04.2016	XD-ICHwin

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

Date of issue: 31.08.2016

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
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Physical Technical Testing Institute

Ostrava-Radvanice

Supplement No. 7 to EC-Type Examination Certificate

(1)

(2) **Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0207U

(4) Component: **Model XD-I, XD-Iwin, XD-IH, XD-IHwin, XD-ILwin instrument housing**

(5) Manufacturer: **Limatherm, S.A.**

(6) Address: **ul.Tarnowska 1, 34-600 Limanowa, Poland**

(7) This supplement of certificate is valid for:
- modification of certified component
- prolongation of certificate validity

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, a list of which is mentioned in the schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains other requirement which the manufacturer shall fulfil before products are placed on the market or introduce in service.

(10) Safety requirements of modified parts were fulfil by satisfying of following standards:

EN 60079-0:2009 EN 60079-1:2007 EN 60079-31:2009

(11) Marking of component shall contain symbols:

II 2G Ex d IIC Gb

II 2D Ex t IIIC Db

(12) This type examination certificate is valid till: **30.06.2016**

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV AO 210 NB 1026

Date of issue: 30.06.2011

Number of pages: 2
Page: 1/2

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Physical Technical Testing Institute

Ostrava-Radvanice

(13) **Schedule**

(14) # Supplement No. 7 to EC-Type Examination Certificate N° FTZÚ 03 ATEX 0207U

(15) Description of Component:

One additional material is used for seal:

- Elastosil R701/50

(16) Report No. : 03/0207-D7 2 pages

(17) Schedule of limitations:

17.1 The special conditions described in main document and the supplement No.1÷6 ale valid in all whole range.

17.2 T_{serv}: -40°C to +100°C/85°C with window, for instrument housing used Elastosil as sealing.

17.3 Maximum design gaps of flameproof joints are smaller than maximum permitted gaps according to standard. Verified values of design gaps are mentioned in documentation.

(18) Essential Health and Safety Requirements:

18.1 Covered by standards mentioned in (10) to this certificate.

18.2 The additional test with sealing material were made according to the standard EN 60079-0 and related.

(19) LIST OF DOCUMENTATION

Title:	*Drawing No.:*	*Date:*
Application Manual	N-L2237	16.2.2011
Instrument of housing XD-I		17.2.2011
Instrument housing XD- I	2-Z-L2213	Rev.22.2.2011
Instrument housing XD- Iwin	2-Z-L2214	Rev.22.2.2011
Instrument housing XD- ILwin	2-Z-L3224	Rev.22.2.2011
Instrument housing XD-IH	1-Z-L3218	Rev.22.2.2011
Instrument housing XD-IHwin	1-Z-L3219	Rev.22.2.2011

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ AO 210 NB 1026

Date of issue: 30.06.2011

Number of pages: 2
Page: 2/2

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Physical Technical Testing Institute

Ostrava-Radvanice

(1) # Supplement No. 6 to EC-Type Examination Certificate

(2) **Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0207U

(4) Equipment or protective system: **Model XD-I, XD-Iwin, XD-IH, XD-IHwin and XD-ILwin instrument housing**

(5) Manufacturer: **Limatherm, S.A.**

(6) Address: **ul. Tarnowska 1, 34-600 Limanowa, Poland**

(7) This supplement of certificate is valid for: - modification of certified apparatus

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, a list of which is mentioned in the schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains another requirements, which manufacturer shall fulfil before products are place on market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

EN 60079-0:2006; EN 60079-1:2004; EN 61241-0:2006; EN 61241-1:2004

(11) Marking of equipment shall contain symbols:

II 2G Ex d IIC

II 2D Ex tD A21

(12) This type examination certificate is valid till: **31 January 2013**

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV AO 210 NB 1026

Date of issue: 9.11.2009

Number of pages: 3
Page: 1/3

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(13) **Schedule**

(14) # Supplement No. 6 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0207U

(15) Description of Equipment or Protective System:

Two additional materials are used for seals:

- Thermoplastic elastomer (Tefabloc TO SI 431 60A);
- Fluoroelastomer (FKM-VR1).

(16) Report No. : 03/0207-D6

(17) Special conditions for safe use:

17.1 The special conditions described in main document and the supplement No.1 to 5 are valid in whole range.

17.2 Tserv : -40°C to +100°C for instrument housing used Tefabloc as sealing.

17.3 Tserv : -20°C to +200°C for instrument housing used FKM-VR1 as sealing.

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (10).

The additional tests with sealing material were made according to the standard EN 60079-0 and related.

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210 NB 1026

Date of issue: 9.11.2009

Number of pages: 3

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(13) **Schedule**

(14) **Supplement No. 6 to**
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0207U

(19) **LIST OF DOCUMENTATION**

			dated	revision
•	Application Manual No.:	N – L 2237	08.06.2007	15.06.2009
•	Drawings No.:	2-Z-L2213	17.06.2005	"b" 23.06.2009
		2-Z-L2214	17.06.2005	"b" 23.06.2009
		2-Z-L3218	23.01.2006	"b" 23.06.2009
		2-Z-L3219	23.01.2006	"b" 23.06.2009
		2-Z-L3224	23.01.2006	"b" 23.06.2009
•	Catalogue sheets:	XD-I		updated 10.06.2009
		XD-Iwin		updated 10.06.2009
		XD-IH		updated 10.06.2009
		XD-Ihwin		updated 10.06.2009
		XD-IIwin		updated 10.06.2009

- Technical data of fluoroelastomer FKM-VR1
- Technical data of thermoplastic elastomer – Tefabloc TO SI 431 60A

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE
FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV
FTZÚ Ex
AO 210
NB 1026

Date of issue: 9.11.2009

Number of pages: 3
Page: 3/3

Physical Technical Testing Institute

Ostrava-Radvanice

(1)

Supplement No. 5 to EC-Type Examination Certificate

(2) **Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0207U

(4) Equipment or protective system: **Model XD-I, XD-Iwin, XD-IH, XD-IHwin and XD-ILwin instrument housing**

(5) Manufacturer: **Limatherm, S.A.**

(6) Address: **ul. Tarnowska 1, 34-600 Limanowa, Poland**

(7) This supplement of certificate is valid for: - recertification according to the new standards EN 60079-0, EN 60079-1,EN 61241-0 and EN 61241-1

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains another requirement, which manufacturer shall fulfil before products are place on market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

EN 60079:2006 EN 60079-1:2004 EN 61241-0:2006 EN 61241-1:2004

(11) Marking of equipment shall contain symbols:

II 2GD Ex d tD IIC

(12) This type examination certificate is valid till: **31 January 2013**

Responsible person:

Dipl. Ing. Sindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210 NB 1026

Date of issue: 17.01.2008

Number of pages: 3
Page: 1/3

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(13) **Schedule**

(14) # Supplement No. 5 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0207U

(15) Description of Equipment or Protective System:

New condition for the instrument housing XD-I, XD-Iwin , XD – IH; XD-IHwin; XD-ILwin :

- Recertification according to the standards EN 60079-0 and EN 60079-1;
- Certification for dust areas according to the standards EN 61241-0 and EN 61241-1;
- Overpressure test acc. cl. 15.1.3.1. EN 60079-1 with pressure 50 bars (the overpressure test on each piece of enclosure is not more demand)

(16) Report No. : 03/0207

(17) Special conditions for safe use:

17.1 The special conditions described in main document and the supplement No.1 to 4 are valid in whole range.

17.2 T_{serv} : -40°C to +100°C for instrument housing type XD-I; XD-IH , without a window

17.3 T_{serv} : -40°C to +85°C for instrument housing type XD-Iwin; XD-IHwin , XD-ILwin, with a window.

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (10) of this supplement.

Any relevant tests are not necessary to execute according to successional standard EN 60079-0, EN 60079-1, EN 61241-0 and EN 61241-1 as that were made acc. Standard EN 50 014, EN 50 018 and EN 50281-1-1.

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE
FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV
FTZÚ Ex
AO 210
NB 1026

Date of issue: 17.01.2008

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(13) **Schedule**

(14) **Supplement No. 5 to**
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0207U

(19) **LIST OF DOCUMENTATION**

			dated	revision
•	Users manual No.:	N – L 2237	08.06.2007	
•	Drawings No.:	2-Z-L2213	17.06.2005	05.2007
		2-Z-L2214	17.06.2005	05.2007
		2-Z-L3218	23.01.2006	05.2007
		2-Z-L3219	23.01.2006	05.2007
		2-Z-L3224	23.01.2006	05.2007
•	Catalogue sheets:	XD-I		
		XD-Iwin		
		XD-IH		
		XD-IHwin		
		XD-ILwin		

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210 NB 1026

Date of issue: 17.01.2008

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Physical Technical Testing Institute

Ostrava-Radvanice

(1)

Supplement No. 4 to EC-Type Examination Certificate

(2)

Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0207U

(4) Equipment: **Model XD-I, XD-Iwin, instrument housing**

(5) Manufacturer: **Limatherm, Sp. z o.o.**

(6) Address: **ul. Tarnowska 1, 34-600 Limanowa, Poland**

(7) This supplement of certificate is valid for: - modification of certified apparatus

(8) Modification of certified component and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination relates only to design, examination and testing of the specified component in accordance to the directive 94/9/EC. If applicable, further requirements of the Directive apply to the manufacture and supply of this component.

(10) Safety requirements of modified parts were fulfil by satisfying of following standards:

EN 50014:1997+A1+A2 **EN 50018:2000** **EN 50281-1-1:1998**

(11) Marking of equipment shall contain symbols:

II 2GD EEx d IIC

(12) This type examination certificate is valid till: **31 July 2008**

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex AO 210 NB 1026

Date of issue: 19.07.2006

Number of pages: 2
Page: 1/2

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Physical Technical Testing Institute
Ostrava-Radvanice

(13) **Schedule**

(14) # Supplement No. 4 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0207U

(15) Description of variation to the Equipment:

The instrument housing XD-I and XD-Iwin was tested on max. power dissipation.

Regarding to these results is to this enclosure assorted temperature class T6 and T5

(16) Report No. : 03/0207

(17) Special conditions for safe use:

17.1 The special conditions described in main document are valid in whole range.

17.2 Max. dissipation power for temperature class are as follow:

Max. power dissipation (W)				
T_{amb}	Temperature class T6 85°C	Pztr (W) For all variety of enclosures position horizontally/vertically	Temperature class T5 100°C	Pztr (W) For all variety of enclosures position horizontally/vertically
40°C	Δ 0≤40 K	26/20	Δ 0≤55 K	38/33
55°C	Δ 0≤25 K	15/11	Δ 0≤40 K	26/20
70°C	Δ 0≤10 K	5/4	Δ 0≤25 K	15/11
85°C	N.A.	--	Δ 0≤10 K	5/4

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (10) of this supplement.

(19) LIST OF DOCUMENTATION

- Operating instruction dated 14.07.2006

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex AO 210 NB 1026

Date of issue: 19.07.2006

Number of pages: 2

Page: 2/2

Physical Technical Testing Institute

Ostrava-Radvanice

(1)

Supplement No. 3 to EC-Type Examination Certificate

(2)

Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0207U

(4) Equipment: **Model XD-I... Series instrument housing (incl. XD-ILwin, XD-IH, XD-IHwin)**

(5) Manufacturer: **Limatherm, Sp. z o.o.**

(6) Address: **ul. Tarnowska 1, 34-600 Limanowa, Poland**

(7) This supplement of certificate is valid for: - modification of certified apparatus

(8) Modification of certified component and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination relates only to design, examination and testing of the specified component in accordance to the directive 94/9/EC. If applicable, further requirements of the Directive apply to the manufacture and supply of this component.

(10) Safety requirements of modified parts were fulfil by satisfying of following standards:

EN 50014:1997+A1+A2 **EN 50018:2000** **EN 50281-1-1:1998**

(11) Marking of equipment shall contain symbols:

II 2GD EEx d IIC

(12) This type examination certificate is valid till: **31 July 2008**

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210 NB 1026

Date of issue: 10.03.2006

Number of pages: 2

Page: 1/2

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Physical Technical Testing Institute

Ostrava-Radvanice

(13) **Schedule**

(14) # Supplement No. 3 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0207U

(15) Description of variation to the Equipment:

- The drawings with more details were filled in the documentation.
- Variations with high cover (XD-IH and XD-IHwin) or cover with window (XD-ILwin).
- Also the thickness of the window has been increased to 15 mm.

(16) Report No. : 03/0207, changes on page 7

(17) Special conditions for safe use:
The special conditions described in main document are valid in whole range.

(18) Essential Health and Safety Requirements:
Covered by standards mentioned in (10) of this supplement.

(19) LIST OF DOCUMENTATION

- Catalogue list XD-IH; XD-IHwin; ID-ILwin
- Drawings No.:

2 – Z – L2213	10.06.2005
2 – Z – L2214	17.06.2005
2 – Z – L3224	23.01.2006
1 – Z – L3218	23.01.2006
1 – Z – L3219	23.01.2006
2 – Z – L3357	06.03.2006

Responsible person:

Date of issue: 10.03.2006

Dipl. Ing. Šindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210 NB 1026

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Physical Technical Testing Institute

Ostrava-Radvanice

(1)

Supplement No. 2 to EC-Type Examination Certificate

(2)

Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0207U

(4) Equipment: **Model XD-I, XD-Iwin, instrument housing**

(5) Manufacturer: **Limatherm, Sp. z o.o.**

(6) Address: **ul. Tarnowska 1, 34-600 Limanowa, Poland**

(7) This supplement of certificate is valid for: - modification of certified apparatus

(8) Modification of certified component and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination relates only to design, examination and testing of the specified component in accordance to the directive 94/9/EC. If applicable, further requirements of the Directive apply to the manufacture and supply of this component.

(10) Safety requirements of modified parts were fulfil by satisfying of following standards:

EN 50014:1997+A1+A2 **EN 50018:2000** **EN 50281-1-1:1998**

(11) Marking of equipment shall contain symbols:

II 2GD EEx d IIC

(12) This type examination certificate is valid till: **31 July 2008**

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210 NB 1026

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Physical Technical Testing Institute

Ostrava-Radvanice

(13) **Schedule**

(14) # Supplement No. 2 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0207U

(15) Description of Equipment or Protective System:

a) In cover XD-I and XD-Iwin designed for housing type XD-I and XD-Iwin there is possible to make a caution in free additional languages: German, Italian, Spanish etc.
There is also possibility to make a logo according to personal requirements of clients.

b) The taper NPT thread according to ANSI/ASME B1.20.1-1983 is executed in openings under cable glands or sensors with modification to meet simultaneously standards **IEC 60079-1**, **EN 50018**, **CSA C22.2No.5** and **FM 3615.**

(16) Report No. : 03/0207, changes on page 7

(17) Special conditions for safe use:
The special conditions described in main document are valid in whole range.

(18) Essential Health and Safety Requirements:
Covered by standards mentioned in (10) of this supplement.

(19) LIST OF DOCUMENTATION

➢ Drawings No.:	3 - L2043		17.06.2005
	3 - L2044		10.06.2005
	3 - L2045		17.06.2005
	3 - L2046		10.06.2005
➢ Annex for OIT-17/03		updated	01.06.2005

(Taper thread NPT, R modification for flameproof EEx d and explosionproof (XP) enclosures)

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE
FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV
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Physical Technical Testing Institute

Ostrava-Radvanice

(1)

Supplement No. 1 to EC-Type Examination Certificate

(2)

Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0207U

(4) Equipment or protective system: **Model XD-I, XD-Iwin, instrument housing**

(5) Manufacturer: **Podhalańska Fabryka Aparatury Pomiarowej Limatherm, Sp. z o.o.**

(6) Address: **ul. Tarnowska 1, 34-600 Limanowa, Poland**

(7) This supplement of certificate is valid for:
- modification of certified apparatus
- modification of apparatus marking

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains another requirements, which manufacturer shall fulfil before products are place on market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

EN 50014:1997+A1+A2 **EN 50018:2000** **EN 50281-1-1:1998**

(11) Marking of equipment shall contain symbols:

II 2GD EEx d IIC

(12) This type examination certificate is valid till: **31 July 2008**

Responsible person:

Mr. Jaroslav Šindler
Head of certification body

AUTORIZOVANÁ OSOBA 210 TECHNICKÝ ZKUŠEBNÍ ÚSTAV, s.p. FTZÚ Ex ÚNMZ

Date of issue: 15.04.2004

Number of pages: 4
Page: 1/4

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(13) **Schedule**

(14) # Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0207U

(15) Description of Equipment or Protective System:

The threaded hole for flameproof cable gland M20x1,5; M24x1,5; M25x1,5; G½",BSP½"; G ¾", BSP ¾"; Rc ½mod, BSPT½mod; Rc ¾mod, BSPT ¾mod; ½" NPTmod or ¾" NPTmod is prepared on the body of enclosure.

The threaded hole M20x1,5; M24x1,5; M25x1,5; M27x2; G½", BSP½"; G ¾", BSP ¾"; Rc ½mod, BSPT½mod; Rc ¾mod, BSPT ¾mod; ½" NPTmod or ¾" NPTmod is prepared for thermowell sensor measuring insert.

(16) Report No. : 03/0207, changes on pages 6,13

(17) Special conditions for safe use:

The special conditions described in main document are valid in whole range.

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (10) of this certificate.

Responsible person:

Date of issue: 15.04.2004

Mr. Jaroslav Šindler
Head of certification body

AUTORIZOVANÁ OSOBA 210 FYZIKÁLNĚ-TECHNICKÝ ZKUŠEBNÍ ÚSTAV, s.p. FTZÚ Ex ÚNMZ

(13) **Schedule**

(14) # Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0207U

TYPE KEY

XD – I □ - . - ../□ - ../□ - ../□ - . ..

TYPE OF INSTRUMENT HOUSING

empty or win

SYMBOL OF ELEMENTS / SEALS MATERIAL
2 = M+S
4 = N+S

SYMBOL OF CONDUIT THREAD D_3 - D_2
M2 = M20x1,5
M25 = M25x1.5
G2 = G ½, BSP ½
G3 = G ¾, BSP¾
R2 = Rc ½ mod, BSPT ½mod – modified ac. to OIT-17/03
R3 = Rc ¾ mod, BSPT ¾mod – modified ac. to OIT-17/03
N2 = ½ NPTmod – modified ac. to OIT-17/03
N3 = ¾ NPTmod – modified ac. to OIT-17/03
PD = plugged
Notice:
Type: "**size of thread / PD"** if thread is plugged ex. **M2/PD,**etc.

SYMBOL OF PROCESS THREAD D_1
M2 = M20x1,5
M24 = M24x1.5
M25 = M25x1.5
M27 = M27x2
G2 = G ½, BSP ½
G3 = G ¾, BSP¾
R2 = Rc ½ mod, BSPT ½mod – modified ac. to OIT-17/03
R3 = Rc ¾ mod, BSPT ¾mod – modified ac. to OIT-17/03
N2 = ½ NPTmod – modified ac. to OIT-17/03
N3 = ¾ NPTmod – modified ac. to OIT-17/03
PD = plugged
Notice:
Type: "**size of thread / PD"** if thread is plugged ex. **M2/PD,**etc.

SYMBOL OF PAINT TYPE: SE – SPRAY EPOXY, C – CREODUR

SYMBOL OF PAINT COLOUR :
al = ALU NATURAL COLOUR; sb = RAL 5015 SKY-BLUE; sg = RAL 7032 SILICON–GREY; gr = RAL 7035 GREY;
ag = RAL 9002 ASHEN GREY-WHITE; sh = RAL 9006 SHINE;

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(13) **Schedule**

(14) **Supplement No. 1 to**
EC-Type Examination Certificate N° FTZÚ 03 ATEX 0207U

(19) **LIST OF DOCUMENTATION**

➢ Application manual No.	N-L2237	dated	05.04.2004
➢ Drawings No.:	2-Z-L2213		06.04.2004
	2-Z-L2214		06.04.2004
	4-L2177		13.01.2004
	4-L2178		13.01.2004
	4-L2249		13.01.2004
➢ Technical specification about *"soda lime glass"*			04.11.2003
➢ Annex for OIT-17/03 (taped thread NPT,R modification for flame proof EEx d and explosionproof (XP) enclosures			

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Physical Technical Testing Institute

Ostrava-Radvanice

(1) # EC-Type Examination Certificate

(2) **Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

(3) EC-Type Examination Certificate Number:

FTZÚ 03 ATEX 0207 U

(4) Component: **Model XD-I, XD-Iwin, instrument housing**

(5) Manufacturer: **Podhalańska Fabryka Aparatury Pomiarowej Limatherm, Sp. z o.o.**

(6) Address: **ul. Tarnowska 1, 34-600 Limanowa, Poland**

(7) This Component and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physical Technical Testing Institute, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report N°

03/0207 dated 24 July 2003

(9) Compliance with Essential Health and safety requirements has been assured by compliance with:

EN 50014:1997+A1+A2 **EN 50018:2000** **EN 50281-1-1:1998**

The sign „U" placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

(10) This EC-TYPE EXAMINATION CERTIFICATE relates only to design, examination and testing of the specified component in accordance to the directive 94/9/EC. If applicable, further requirements of the Directive apply to the manufacture and supply of this component.

(11) The marking of the component shall include following:

II 2GD EEx d IIC

This EC-Type Examination Certificate is valid till: **31 July 2008**

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body

Date of issue: 28 July 2003

Number of pages: 1/3

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(13) **Schedule**

(14) **EC-Type Examination Certificate N° FTZÚ 03 ATEX 0207 U**

(15) Description of Component:

Instrument housing is foreseen to accommodate different electronics devices for working in hazardous areas.

The enclosure and cover are made of aluminium pressure die-casting (Mg<6%).

An earth terminal is placed on the body of enclosure.

The cover is fixed to the body by thread M100x2. The cover is sealed by "O" ring.

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

The threaded hole for flameproof cable gland M20x1,5; G1/2; G3/4; 1/2NPTmod or 3/4NPTmod is prepared on the body of enclosure.

The threaded hole M20x1,5; M25x1,5; G1/2; G3/4; 1/2NPTmod or 3/4NPTmod is prepared for thermowell sensor measuring insert .

The enclosure is coated by chemically resistant paint.

(16) Report No. : 03/0207

(17) Schedule of Limitations:

17.1 -40°C <Tserv. >100°C pro XD-I

17.2 -40°C<Tserv. > 85°C pro XD-Iwin

17.3 IP protection 66 ÷ 68 – is depend on applied cable gland.

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (9).

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE
FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV
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(13) **Schedule**

(14) **EC-Type Examination Certificate N° FTZÚ 03 ATEX 0207U**

(19) **LIST OF DOCUMENTATION**

- Aluminium specification
- Resistance of paint coatings to aggressive chemical agents and environment
- Earth terminals, protection terminals
- Seal rubber specification
- Taper threads for explosionproof/flameproof openings
- Silicone rubber specification R701/40-R701/80
- Silicone encapsulant "Sylgard 567" specification
- Condition for testing of in instrument housing of protection against continuous submersion in water – IP 68
- Application manual N-L2237 dated 09.06.2003
- Data label
- Catalogue sheets: EEx d instrument housing typ XD-I
  EEx d instrument housing typ XD-Iwinn

➢ Drawings N°:

4-Z-L2178	dated 12.03.2003
4-Z-L2249	dated 17.06.2003
4-Z-L2177	dated 17.06.2003
2-Z-L2213	dated 13.06.2003
2-Z-L2214	dated 13.06.2003

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