



Physical Technical Testing Institute
Ostrava-Radvanice



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 04 ATEX 0265 U

(4) Component: **Model XD-I80, XD-I80win, XD-I80C, XD-I80Cwin, instrument housing**

(5) Manufacturer: **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°
04/0265 dated 24th September 2004

(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: **30th September 2009**

Responsible person:


Mr. Šindler Jaroslav
Head of certification body



Date of issue: **30th September 2004**

Number of pages: **1/3**

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**Physical Technical Testing Institute
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(14) **EC-Type Examination Certificate N° FTZÚ 04 ATEX 0265 U**

(15) Description of Component:

Instrument housing size 80 is foreseen to accommodate different electronics devices for working in hazardous areas with flammable gases, vapours and dusts.

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 M80x1,5. The cover is sealed by "O" ring.

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

The threaded holes for flameproof cable gland M20x1,5; M24x1,5; M25x1,5; G1/2; BSP1/2; G3/4; BSP3/4; Rc1/2mod; BSPT1/2mod; Rc3/4mod; BSPT3/4mod; 1/2NPTmod or 3/4NPTmod are prepared on the body of enclosure.

The threaded hole M20x1,5; M24x1,5; M25x1,5; M27x2; G1/2; BSP1/2; G3/4; BSP3/4; Rc1/2mod; BSPT1/2mod; Rc3/4mod; BSPT3/4mod; 1/2NPTmod or 3/4NPTmod is prepared for thermowell sensor measuring insert.

The unused hole is blinded with a stopping plug 1/2NPT; 3/4NPT; R1/2; BSPT1/2 or BSPT3/4.

The enclosure is coated by chemically resistant paint.

(16) Report No. : 04/0265

(17) Schedule of Limitations:

17.1 -40°C <Tserv. >100°C for XD-I80, XD-I80C.

17.2 -40°C <Tserv. > 85°C for XD-I80win, XD-I80Cwin.

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

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (9) of this certificate.

Responsible person:


Mr. Šindler Jaroslav
Head of certification body



Date of issue: 30 September 2004

Number of pages: 2/3

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(14) **EC-Type Examination Certificate N° FTZÚ 04 ATEX 0265U**

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LIST OF DOCUMENTATION

- Aluminium specification
- Resistance of paint coatings to aggressive chemical agents and environment
- Earth terminals, protection terminals 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-L2525 dated 28.07.2004
- Catalogue sheets: EEx d instrument housing typ XD-I80
EEx d instrument housing typ XD-I80win
EEx d instrument housing typ XD-I80C
EEx d instrument housing typ XD-I80Cwin
- Drawings N°:
 - 2-Z-L2449 dated 14.06.2004
 - 2-Z-L2450 dated 14.06.2004
 - 2-Z-L2578 dated 30.07.2004
 - 2-Z-L2579 dated 30.07.2004
 - 4-L2177 dated 13.01.2004
 - 4-L2178 dated 13.01.2004
 - 4-L2249 dated 13.01.2004





Physical Technical Testing Institute
Ostrava-Radvanice



**Supplement No. 1 to
EC-Type Examination Certificate**

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

(3) EC-Type Examination Certificate Number:

FTZÚ 04 ATEX 0265U

(4) Equipment: **Model, instrument housing XD-I80, XD-I80win, XD-I80C, XD-I80Cwin**

(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 fulfilled 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: **30 September 2009**

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 19.07.2005

Number of pages: 2

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**Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 04 ATEX 0265U**

(15) Description of Equipment:

a) In covers designed for instrument housing type XD-I80... there is possible to make a caution inscription in free additional languages: German, Italian, Spanish etc.

There is also possibility to make a logo according to personal requirement of our 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 C22.2 No. 5** and **FM 3615**.

(16) Report No. : 03/0265, changes on page 6a

(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 – L1947 | 13.07.2005 |
| | 3 – L1948 | 13.07.2005 |
| | 3 – L1954 | 13.07.2005 |
| | 3 – L1990 | 13.07.2005 |
| ➤ 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



Date of issue: 19.07.2005

Number of pages: 2

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Physical Technical Testing Institute
Ostrava-Radvanice



Supplement No. 2 to EC-Type Examination Certificate

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

(3) EC-Type Examination Certificate Number:

FTZÚ 04 ATEX 0265U

(4) Equipment: **Model, instrument housing XD-I80, XD-I80win, XD-I80C, XD-I80Cwin**

(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 fulfilled 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: **30 September 2009**

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 10.03.2006

Number of pages: 2

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**Supplement No. 2 to
EC-Type Examination Certificate N° FTZÚ 04 ATEX 0265U**

(15) Description of variation to the Equipment:

- The drawings with more details were filled in the documentation.
- Also the thickness of the window has been increased to 10 mm.

(16) Report No. : 03/0265, changes on page 6a

(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.:	2 – Z – L2449	17.06.2005
	2 – Z – L2450	17.06.2005
	2 – Z – L2578	17.06.2005
	2 – Z – L2579	17.06.2005
	2 – Z – L3358	06.03.2006
	2 – Z – L3359	06.03.2006

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body



Date of issue: 10.03.2006

Number of pages: 2

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Physical Technical Testing Institute
Ostrava-Radvanice



Supplement No. 3 to EC-Type Examination Certificate

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

(3) EC-Type Examination Certificate Number:

FTZÚ 04 ATEX 0265U

(4) Equipment: **Model XD-I80, XD-I80win, 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 fulfilled 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:

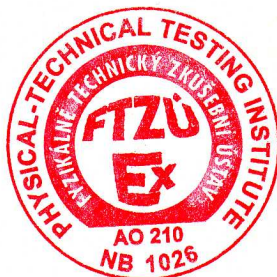


II 2GD EEx d IIC

(12) This type examination certificate is valid till: **30 November 2009**

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 20.07.2006

Number of pages: 2
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**Physical Technical Testing Institute
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(13) **Schedule**

(14) **Supplement No. 3 to
EC-Type Examination Certificate N° FTZÚ 04 ATEX 0265U**

(15) Description of variation to the Equipment:

The instrument housing XD-I80 and XD-I80win was tested on max. power dissipation.
Regarding to these results is to this enclosure assorted temperature class T6 and T5.

(16) Report No. : 04/0265

(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)	Temperature class T5 100°C	Pztr (W)
		For all variety of enclosures position horizontally/vertically		For all variety of enclosures position horizontally/vertically
40°C	Δ 0≤40 K	22/17	Δ 0≤55 K	32/26
55°C	Δ 0≤25 K	13/10	Δ 0≤40 K	22/17
70°C	Δ 0≤10 K	4,5/3,5	Δ 0≤25 K	13/10
85°C	N.A.	--	Δ 0≤10 K	4,5/3,5

(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



Date of issue: 20.07.2006

Number of pages: 2

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Physical Technical Testing Institute
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Supplement No. 4 to EC-Type Examination Certificate

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

(3) EC-Type Examination Certificate Number:

FTZÚ 04 ATEX 0265U

(4) Equipment: **Model XD-I80, XD-I80win, XD-I80C, XD-I80Cwin, 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
- recertification according to the new standards and
prolongation of the validity

(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 fulfilled by satisfying of following standards:

EN 60079-0:2006; EN 60079-1:2007; EN 61241-0:2006; EN 61241-1:2004

(11) Marking of equipment shall contain symbols:

 **II 2GD Ex d tD A21 IIC**

(12) This type examination certificate is valid till: **31.08.2013**

Responsible person:


Dipl. Ing. Sindler Jaroslav
Head of certification body



Date of issue: **12.08.2008**

Number of pages: **3**

Page: **1/3**

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**Supplement No. 4 to
EC-Type Examination Certificate N° FTZÚ 04 ATEX 0265U**

(15) Description of variation to the Equipment:

The instrument housing XD-I80 and XD-I80win was recertified according to the standards EN60079-0, EN 60079-1, EN 61241-0 and EN 61241-1.

The overpressure test was made according to cl. 15.3.1 of the standard EN 60079-1 by overpressure 65 bar (the requirement on the overpressure test made on each piece of the enclosure is cancelled).

(16) Report No. : 04/0265-D4

(17) Special conditions for safe use:

17.1 The special conditions described in main document and the Supplements No. 1, 2 and 3 are valid in whole range.

(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 according to the Standard EN 50 014, EN 50 018 and EN 50281-1-1.

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 12.08.2008

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Schedule

**Supplement No. 4 to
EC-Type Examination Certificate N° FTZÚ 04 ATEX 0265U**

LIST OF DOCUMENTATION

- | | | | |
|---|---------------------------------|----------|------------|
| o | Application manual No.: N-L2525 | dated | 20.06.2007 |
| o | Drawings No.: 2-Z-L2449 | rev. „b“ | 20.06.2007 |
| | 2-Z-L2450 | rev. „b“ | 20.06.2007 |
| | 2-Z-L2578 | rev. „a“ | 20.06.2007 |
| | 2-Z-L2579 | rev. „a“ | 20.06.2007 |
| | 4-L2684 | rev. „a“ | 20.06.2007 |
| o | Data sheets: | | |
| | Type XD-I80 | | |
| | Type XD-I80 | | |
| | Type XD-I80win | | |
| | Type XD-I80C | | |
| | Type XD-I80Cwin | | |

Date of issue: 12.08.2008



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Physical Technical Testing Institute
Ostrava – Radvanice



Supplement No. 5 to EC-Type Examination Certificate

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

(3) EC-Type Examination Certificate Number:

FTZÚ 04 ATEX 0265U

(4) Component: **Universal instrument housing type
XD-I80, XD-I80win, XD-I80C, XD-I80Cin**

(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
- verification according to new standards
- prolongation of certificate validity

(8) Modification of certified component and any of its approved variants are specified in documentation, a 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 fulfilled by satisfying of the following standards:

EN 60079-0:2012; EN 60079-1:2007; EN 60079-31:2009

(11) Marking of component shall contain symbols:

 **II 2G Ex d IIC Gb**

 **II 2D Ex tb IIIC Db**

(12) This type examination certificate is valid till: **31.12.2018**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 17.12.2013

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**Physical Technical Testing Institute
Ostrava – Radvanice**

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**Supplement No. 5 to
EC-Type Examination Certificate N° FTZÚ 04 ATEX 0265U**

(15) Description of Component:

Modification of the instrument housing consists of:

- 1) Using only type of threads M and NPT; the length of NPT threads was changed from 13mm to 16.2mm;
- 2) Change of body in type XD-I80win and XD-I80Cwin – four relieves on the top of body;
- 3) Change the degree of IP protection from IP 68 to IP 65.

The types of instrument housing are recertified according to standards EN 60079-0:2012; EN 60079-1:2007 and EN 60079-31:2009.

(16) Report No.: 04/0265-d5

(17) Schedule of Limitations:

- 17.1 The special conditions described in main document and the supplement No. 1,2,3,4 are valid in whole range;
- 17.2 Max. number, size and position of apertures – see (19) of this supplement;
- 17.3 The enclosure with Ex component certificate shall be applicated only by assumption of filling requests of the standard EN 60079-1:2009 cl.D.3.10;
- 17.4 Service temperature according housing type:

Housing type	Tserv.
XD-I80, XD-I80C	-40°C to +100°C
XD-I80win, XD-I80Cwin	-40°C to +85°C

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 17.12.2013

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**Physical Technical Testing Institute
Ostrava – Radvanice**

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**Supplement No. 5 to
EC-Type Examination Certificate N° FTZÚ 04 ATEX 0265U**

(18) Essential Health and Safety Requirements:

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

(19) List of Documentation:

<i>Title</i>	<i>Drawing No.</i>	<i>Date</i>	<i>Revision</i>
Application manual	N-L2525	04.09.2012	
Data sheet	XD-I80...	31.08.2012	
XD-I80	2-Z-L2449	06.09.2012	c
XD-I80win	2-Z-L2450	27.11.2012	c
XD-I80C	2-Z-L2578	06.09.2012	b
XD-I80Cwin	2-Z-L2479	27.11.2012	b

Responsible person:


Dipl. Ing. Lukáš Martinák

Head of Certification Body



Date of issue: 17.12.2013

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