Physical-Technical Testing Institute
Ostrava - Radvanice

(1) Supplementary EU - Type Examination Certificate No.3

(2) **Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres (Directive 2014/34/EU)**

(3) EU - Type Examination Certificate number:

FTZÚ 05 ATEX 0329X

(4) Product: **Model XD-JB85, junction box**

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

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

(7) This supplementary certificate extends EC - Type Examination Certificate No. FTZÚ 05 ATEX 0329X 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 IEC 60079-0:2018, EN 60079-1:2014, EN 60079-31:2014

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

II 2G Ex db IIC T6...T4 Gb
II 2D Ex tb IIIC T=77/97/117°C Db

(12) This certificate is valid till: **31.07.2024**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

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

Date of issue: 25.07.2019

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. 3 to FTZÚ 05 ATEX 0329X

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Modification of certified apparatus;
- Evaluation according to the newest standards;
- Prolongation of certificate validity.

The possibility of using an o-ring made of TPE and FKM is added to the device. The drawing documentation has been revised.

The design of flameproof enclosure and electrical parameters are unchanged.

The device is verified according to standards EN IEC 60079-0:2018, EN 60079-1:2014 and EN 60079-31:2014.

(16) Report Number.: 05/0329/5

(17) Specific Conditions of Use:

1. Ambient temperature range: -40°C ≤ Tamb ≤ +100°C for T4
   -40°C ≤ Tamb ≤ +80°C for T5
   -40°C ≤ Tamb ≤ +60°C for T6.
2. Minimum Tamb for using o- ring FKM: -20°C.
3. For information on the dimensions of the flameproof joints the manufacturer shall be contacted.
4. Equipment must be installed to avoid a risk from propagating brush discharges for application in explosive dust atmosphere.
5. The device may be equipped with Ex- equipment cable glands or Ex- equipment blanking elements with type of Ex-protection – see cl. (11) and with minimum IP code IP6X.

(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.

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex AO 210 NB 1026

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(13) **Schedule**

(14) **Supplementary EU - Type Examination Certificate No. 3 to FTZÚ 05 ATEX 0329X**

(19) Drawings and Documents:

Number	Sheets	Issue	Date	Description
N-L4254	8	--	05.03.2019	Application manual
XD-JB85-TB	3	--	04.03.2019	Data sheet
XD-JB85-TS	3	--	04.03.2019	Data sheet
2-Z-L3027 – XD-JB85-TB	1	c	06.03.2019	Drawing
2-Z-L3048 – XD-JB85-TS	1	c	06.03.2019	Drawing

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ EX AO 210 NB 1026

Date of issue: 25.07.2019

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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 05 ATEX 0329X

(4) Equipment or protective system: **Model XD-JB85, junction box**

(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
- 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 requirements, which manufacturer shall fulfil before products are placed on the market or introduce in service.

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

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

(11) Marking of equipment shall contain symbols:

II 2G Ex d IIC T6-T4 Gb

II 2D Ex tb IIIC T=77/97/117°C Db

(12) This type examination certificate is valid till: **03.06.2018**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE
FTZÚ Ex
AO 210
NB 1026

Date of issue: 03.06.2013

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(13) **Schedule**

(14) # Supplement No. 2 to EC-Type Examination Certificate N° FTZÚ 05 ATEX 0329X

(15) Description of Equipment or Protective System:

Subject of this supplement is prolongation of certificate validity of newest standards. Modification of this equipment is extension the length of NPT threads.

(16) Report No.: 05/0329-D2 dated: 28.05.2013

(17) Special conditions for safe use:

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

(18) Essential Health and Safety Requirements:

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

(19) List of Documentation:

Title:	*Drawing No.:*	*Date:*
Aplication Manual	N-L4254	09.07.2012
XD-JB85 with terminal strip Data sheet	--	12.07.2012
XD-JB85 with terminal block Data sheet	--	12.07.2012
XD-JB85-TB	2-Z-L3027	09.07.2012 - rev. b
XD-JB85-TS	2-Z-L3048	09.07.2012 - rev. b

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

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

Date of issue: 03.06.2013

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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 05 ATEX 0329X

(4) Equipment or protective system: **Model XD-JB85, junction box**

(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 new standards
- prolongation of certificate validity

(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 60079-0:2006; 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 T6-T4 T=77/97/117°C

(12) This type examination certificate is valid till: **31. 07. 2012**

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: 31.07.2007

Number of pages: 3

Page: 1/3

FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV, státní podnik, Pikartská 7, 716 07 Ostrava Radvanice,
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(13) **Schedule**

(14) # Supplement No. 1 to EC-Type Examination Certificate N° FTZÚ 05 ATEX 0329X

(15) Description of Equipment or Protective System:

The terminal box XD-JB85 was recertified based on EN 60079-0, EN 60079-1, EN 61241-0 and EN 61241-1.

(16) Report No. : 05/0329-D1

(17) Special conditions for safe use:

The conditions, mentioned in the main document are valid in whole range.

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (10).

Any relevants 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:

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

Date of issue: 31.07.2007

Dipl. Ing. Šindler Jaroslav
Head of certification body

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(13) **Schedule**

(14) # Supplement No. 1 to EC-Type Examination Certificate N° FTZÚ 05 ATEX 0329X

(19) ## LIST OF DOCUMENTATION

- Application manual No. N-L3101 dated 18.07.2007
- Catalogue sheets:

Ex d – Junction Box with terminal strip Ex e, type XD-JB85-TG5/n	dated 07.2007
Ex d – Junction Box with terminal strip Ex e, type XD-JB85-ET5n	dated 07.2007
Ex d – Junction Box with terminal block Ex e, type XD-JB85-TB6	dated 07.2007
Ex d – Junction Box with terminal block Ex e, type XD-JB85-TB8	dated 07.2007
Ex d – Junction Box with terminal block Ex e, type XD-JB85-ETB	dated 07.2007

- Drawings No.:

2-Z-L3027	dated 12.01.2006	revision „a“	dated 19.07.2007
2-Z-L3759	dated 12.01.2006	revision „a“	dated 19.07.2007

Responsible person: Date of issue: 31.07.2007

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)

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 05 ATEX 0329X

(4) Equipment or protective system: **Model XD-JB85, junction box**

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

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

(7) This equipment or protective system 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°

05/0329 dated November 2005

(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

(10) If the sign „X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and testing of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include following:

II 2GD EEx d IIC T6-T4 T=77/97/117°C

This EC-Type Examination Certificate is valid till: **30 November 2010**

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: 30.11.2005

Number of pages: 1/3

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Physical Technical Testing Institute
Ostrava-Radvanice

(13) **Schedule**

(14) **EC-Type Examination Certificate N° FTZÚ 05 ATEX 0329X**

(15) Description of Equipment or Protective System:

Junction box **XD-JB85** is intended to connect cables via junctions.
The body and cover of the enclosure are made of aluminium pressure die-casting (Mg<6%).
The earth junctions are placed inside and outside of the body of enclosure.
There inside in the enclosure could be installed junctions type ETSn and TSn, TG5/n and ETG5/n, ETB,TB6 or TB8 to section 4 mm^2.
The cover is fixed to the body by thread M85x2, 6H/6g. The cover is sealed by "O" ring.
The threaded holes for flameproof cable gland are prepared on the body of enclosure and can have parallel type threads: **M...** , **G...**,BSP... or taper threads type : **Rc...mod**, **BSPT...mod**, **...NPTmod**.
The threaded hole are prepared in the body for thermowell or sensor, and can have parallel threads type **M...** , **G...**,**BSP...** or taper threads type: **Rc...mod**, **BSPT...mod**, **...NPTmod.**
The taper NPT and Rc threads are 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.
In the cover designed for housing type XD-JB85 there is possible to make a caution inscription in free aditional languages: german, italian, spanish etc. There is also possibility to make a logo according to personal requirements of clients.
The enclosure is coated by chemically resistant paint.
The unused holes can be blinded with a certified stopping plug.

(16) Report No. : 05/0329

(17) Special conditions for safe use: X

17.1 -40°C < Tamb >100°C for T4
17.2 -40°C < Tamb >80°C for T5
17.3 -40°C < Tamb >60°C for T6
17.4 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:

Dipl. Ing. Šindler Jaroslav
Head of certification body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ AO 210 NB 1026

Date of issue: 30 November 2005

Number of pages: 2/3

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(13) **Schedule**

(14) **EC-Type Examination Certificate N° FTZÚ 05 ATEX 0329X**

(19) **LIST OF DOCUMENTATION**

- Application manual N-L3101 dated 06.10.2005

- Catalogue sheets:
  - EEx d junction box, type XD-JB85 with terminals ETSn/TSn 09.2005
  - EEx d junction box, type XD-JB85 with terminals ETG5/n and TG5/n 09.2005
  - EEx d junction box, type XD-JB85 with terminals ETB 09.2005
  - EEx d junction box, type XD-JB85 with terminals TB6 09.2005
  - EEx d junction box, type XD-JB85 with terminals TB8 09.2005

- Drawings N°: 2-Z-L3027 dated 06.10.2005
  2-Z-L3048 dated 06.10.2005

Documentation which is archieved by certification 05 ATEX 0262U:

- Aluminium specification
- Resistance of paint coatings to aggressive chemical agents and environment
- Earth junctions, protection junctions (ETM-4 a PTM-1.5)
- 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

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ AO 210 NB 1026

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