



(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 Examination Certificate number:

FTZÚ 10 ATEX 0036X

(4) Product: **Flameproof bushing type N ...; T....**

(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 10 ATEX 0036X 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

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

 **II 2G Ex db IIC T4 Gb**

(12) The certificate is valid till: **31.08.2025**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 28.08.2020

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Physical-Technical Testing Institute
Ostrava - Radvanice

(13)

Schedule

(14) **Supplementary EU - Type Examination Certificate No. 3
to FTZÚ 10 ATEX 0036X**

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- evaluation according new release of standards: EN IEC 60079-0:2018, EN 60079-1:2014;
- verification of changes;
- prolongation of certificate validity;
- actualization of documentation.

This supplement to certificate verifies new version of N bushing, with external 3/4 NPT thread. Other verified types of N and T bushing are remain unchanged.

Newly, the series of N bushing expands as follow:

N -		-		-	
Thread size: M24 = M24x1.5 M24 = M25x1.5 N3 = 3/4NPT					
Conductor cross section: 025 = 0.25 mm ² 050 = 0.50 mm ² 075 = 0.75 mm ²					
Number of core: 1 ÷ 16					

(16) Report Number.: 10/0036/3

Responsible person:

Lukáš Martinák
Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 28.08.2020

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**Physical-Technical Testing Institute
Ostrava - Radvanice**

(13)

Schedule

(14) **Supplementary EU - Type Examination Certificate No. 3
to FTZÚ 10 ATEX 0036X**

(17) Specific Conditions of Use:

1. Service temperature of the bushing is: $-40\text{ }^{\circ}\text{C} \leq T_{\text{serv.}} \leq +120\text{ }^{\circ}\text{C}$. Temperature rise of the bushing does not exceed 45K for nominal current.
2. Line bushings type N...; T... screwed in threaded holes must meet minimum requirements of EN 60079-1 clause 5.3.
3. Bushings are not intended to be repaired.

(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	Revision	Sheets	Date	Description
N - L4129	-	5	04.05.2020	Manual
3 - Z - L3972	C	1	04.05.2020	Drawing
4 - L4399	-	1	20.02.2020	Drawing

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 28.08.2020

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(1) **Supplementary EU - Type Examination Certificate No.2**

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

(3) EU - Type Examination Examination Certificate number:

FTZÚ 10 ATEX 0036X

(4) Product: **Flameproof bushing type N ...; T....**

(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 10 ATEX 0036X 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

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

 **II 2G Ex db IIC T4 Gb**

(12) The certificate is valid till: **04.11.2021**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 04.11.2016

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Physical-Technical Testing Institute
Ostrava - Radvanice

(13)

Schedule

(14) **Supplementary EU - Type Examination Certificate No. 2
to FTZÚ 10 ATEX 0036X**

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Evaluation according to the new edition of standards;
- Prolongation of certificate validity.

The flameproof bushing type N ...; T.... are recertified according to newest standards EN 60079-0:2012, EN 60079-1:2014.

Technical parameters and construction parameters remain unchanged.

(16) Report Number.: 10/0036/2

(17) Specific Conditions of Use:

1. Service temperature of the bushing is: $-40\text{ °C} \leq T_{\text{serv.}} \leq +120\text{ °C}$. Temperature rise of the bushing does not exceed 45K for nominal current.
2. Line bushings type N...; T... screwed in threaded holes must meet minimum requirements of EN 60079-1 clause 5.3.
3. Bushings are not intended to be repaired.

(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	Issue	Sheets	Date	Description
N-L4129	--	5	03.03.2016	Service manual
--	--	1	03.03.2016	Data sheet of bushing type N
--	--	1	03.03.2016	Data sheet of bushing type T
3-Z-L3972	b	1	28.10.2016	Drawing of bushing type N
3-Z-L3706	b	1	28.10.2016	Drawing of bushing type T

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 04.11.2016

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(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 10 ATEX 0036X

(4) Equipment: **Flameproof bushing type N ... ; T...**

(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 other requirements which the 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

(11) Marking of equipment shall contain symbols:

Ex II 2G Ex d IIC T4 Gb

(12) This type examination certificate is valid till: **31.07.2015**

Responsible person:


Dipl. Ing. Sindler Jaroslav
Head of certification body



Date of issue: 15.07.2011

Number of pages: 2

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**Physical Technical Testing Institute
Ostrava-Radvanice**

(13)

Schedule

(14)

**Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 10 ATEX 0036X**

(15) Description:

The label marking of component was changed. This change has no effect on the safety and on the explosion proof construction of component.

(16) Report No. : 10/0036-D1

dated 13.07.2011

(17) Special conditions for safe use:

- $T_{amb} = -40^{\circ}\text{C}$ to 75°C
- For threads parameters see Drwg. No. 3-Z-L3972 and 3-Z-L3706


(18) Essential Health and Safety Requirements:

They are included in standards, which are mentioned in clause (10) of this certificate. The product was approved in accordance with above mentioned standards.

(19) LIST OF DOCUMENTATION

Title	Drawing No.	Rev. Level	Date
Service manual	N-L4129	-	17.05.2011
Data sheet of bushing type T	-	-	17.05.2011
Data sheet of bushing type N	-	-	17.05.2011
Drawing of bushing type N	3-Z-L3972	Rev. a	17.05.2011
Drawing of bushing type T	3-Z-L3706	Rev. a	16.05.2011

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 15.07.2011

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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 10 ATEX 0036X

(4) Equipment or protective system: **Flameproof bushing type N ... ; T...**

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

(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°

10/0036 dated 29 June 2010

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

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

(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 the following:

 **II 2G Ex d IIC T4 Gb**

This EC-Type Examination Certificate is valid till: **31.07.2015**

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 01.07.2010

Number of pages: 3

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Physical Technical Testing Institute
Ostrava-Radvanice

(13)

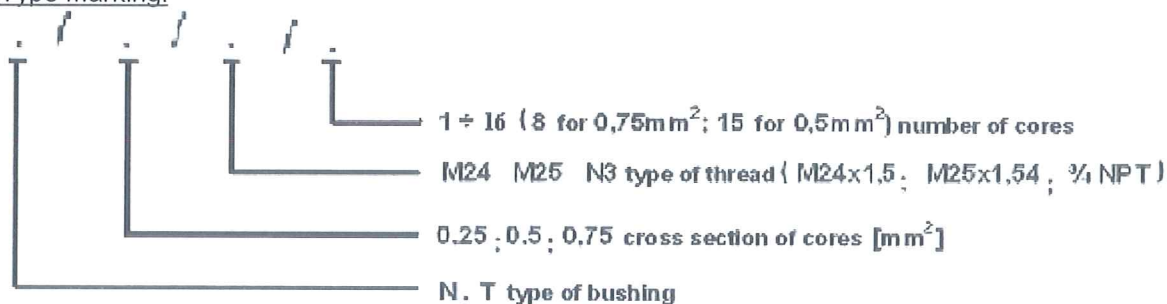
Schedule

(14) EC-Type Examination Certificate N° FTZÚ 10 ATEX 0036X

(15) Description of Equipment or Protective System:

Flameproof line bushings are intended for installation in to flameproof enclosures of explosion-proof apparatus. The body of bushings are made of brass M058 and are nickel-plated. The body of bushings create threaded joint with wall of flame proof enclosure of relevant parameters. Bushings serves as electrical connection between flameproof enclosures or between flame proof enclosure and a terminal compartment with another type of protection, generally increased safety. Installation of the bushing has to be done according to service manual N-L4129. Operating temperature range of bushings is $-40\text{ }^{\circ}\text{C} \leq T_{\text{serv.}} \leq +120\text{ }^{\circ}\text{C}$. Temperature rises of the bushing in case of worst conditions does not exceed 45K. (Max. Currents see table below).

Type marking:



Technical parameters:

Max. Voltage: 500V

Type of bushing	Cross section of the cores [mm ²]	Diameter of cylindrical joint of bushing			Number of conductors	Max. Rated current [A]	Marking of bushing
N	0,25	M24x1,5	M25x1,5	-	1 ÷ 16	4.1	N-025-M24(M25)-1÷16
	0,5				1 ÷ 15	6.5	N-050-M24(M25)-1÷15
	0,75				1 ÷ 8	10.1	N-075-M24(M25)-1÷8
T	0,25	M24x1,5	M25x1,5	3/4NPT	1 ÷ 16	4,5	T-025-M24(M25)(N3)-1÷16
	0,50				1 ÷ 15	6,5	T-050-M24(M25)(N3)-1÷15
	0,75				1 ÷ 8	10,4	T-075-M24(M25)(N3)-1÷18

Responsible person:

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Date of issue: 01.07.2010

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Physical Technical Testing Institute
Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 10 ATEX 0036X**

(16) Report No. : 10/0036 dated 29 June 2010

(17) Special conditions for safe use:

- $T_{amb} = -40^{\circ}\text{C}$ to 75°C
- for threads parameters see Drwg. No. 3-Z-L3972 and 3-Z-L3706

(18) Essential Health and Safety Requirements:

They are included in standards, which are mentioned in clause (9) of this certificate. The product was approved in accordance with above mentioned standards.

(19) LIST OF DOCUMENTATION

Description	Number of drawing	Revision	Date
Service manual	N-L4129	-	29.01.2010
Data sheet of bushing type T	-	-	21.01.2010
Data sheet of bushing type N	-	-	21.01.2010
Drawing of bushing type N	3-Z-L3972	-	10.02.2010
Drawing of bushing type T	3-Z-L3706	-	10.02.2010

Data sheet of compound	U 232A
Data sheet of conductors	HELUTHERM 145

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 01.07.2010

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