



(1) **Supplementary EU - Type Examination Certificate No.5**

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

(3) EU - Type Examination Certificate number:

FTZÚ 02 ATEX 0233X

(4) Product: **Capacitive proximity sensor CPS-24Xi-_-**

(5) Manufacturer: **Dinel, s.r.o.**

(6) Address: **U Tescomy 249, 760 01 Zlín, Czech Republic**

(7) This supplementary certificate extends EC - Type Examination Certificate No. FTZÚ 02 ATEX 0233X 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 60079-11:2012

If the sign "X" is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use specified in the schedule to this certificate.

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

 **II 1G Ex ia IIC T6 Ga**

(12) This certificate is valid till: **31.08.2027**

Responsible person:

v z. Pgor

Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 10.06.2022

Page: 1/2

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Physical-Technical Testing Institute
Ostrava - Radvanice

(13) **Schedule**

(14) **Supplementary EU - Type Examination Certificate No. 5
to FTZÚ 02 ATEX 0233X**

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Evaluation according to the newest standards.
- Technical parameter was changed: Parameter Ci.
- Specific Conditions of Use were changed.
- Extension of certificate validity.

The product construction remains unchanged. The product has been evaluated according to the newest standards mentioned in clause (10). The validity of the certificate has been extended for the next five years. The documentation has been updated and is listed in clause (19).

Parameter Ci was changed from $C_i = 15 \text{ nF}$ to $C_i = 28 \text{ nF}$.

Technical parameters:

Ambient temperature: $-20 \text{ °C} \leq T_a \leq +70 \text{ °C}$.

Intrinsically safe parameters:

Power supply: $U_i = 12 \text{ V}$, $I_i = 15 \text{ mA}$, $P_i = 45 \text{ mW}$, $C_i = 28 \text{ nF}$, $L_i = 10 \text{ μH}$

(16) Report Number: 02/0233/5

(17) Specific Conditions of Use: (point 1 updated, point 3 removed)

1. The apparatus is designed to be connected with supply unit type NSSU, NDSU and NLCU.
2. If some other approved apparatus is used, its output parameters comply with above mentioned parameters, then it is necessary to include galvanic separation and/or in a case of application of apparatus without galvanic separation (Zener safety barrier) it is necessary to provide equipotential equalisation between sensor and point of barrier earthing.

(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:
--	05.2022	10	05.2022	Technical conditions CPS-24
--	04.2022	16	04.2022	User's manual CPS-24
CPS-24-OD-01	05.2022	1	09.05.2022	Label

Responsible person:

v z. Jgon

Dipl. Ing. Lukáš Martinák
Head of Certification Body

Date of issue: 10.06.2022

Page: 2/2



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(1) **Supplementary EU - Type Examination Certificate No.4**

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

(3) EU - Type Examination Certificate number:

FTZÚ 02 ATEX 0233X

(4) Product: **Capacitive proximity sensor CPS-24Xi-_-**

(5) Manufacturer: **Dinel, s.r.o.**

(6) Address: **U Tescomy 249, 760 01 Zlín, Czech Republic**

(7) This supplementary certificate extends EC - Type Examination Certificate No. FTZÚ 02 ATEX 0233X 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+A11:2013, EN 60079-11:2012

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

Ex II 1G Ex ia IIC T6 Ga

(12) This certificate is valid till: **16.08.2022**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 03.08.2017

Page: 1/2

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Physical-Technical Testing Institute
Ostrava - Radvanice

(13) **Schedule**

(14) **Supplementary EU - Type Examination Certificate No. 4
to FTZÚ 02 ATEX 0233X**

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Evaluation according to the newest standards.
- Prolongation of certificate validity.

The product was evaluated according to the newest standard EN 60079-0:2012+A11:2013. The standard EN 60079-26 was removed from list of standards. Approval documentation was updated. Technical parameters and construction of product remain unchanged.

(16) Report Number.: 02/0233/4

(17) Specific Conditions of Use:

None additional to those listed previously.

(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:

Document name/Drawings:	Date:	Sheet:
Technical conditions CPS-24	07.2017	10
Instruction manual CPS-24	06.2017	16
Production documentation CPS-24Xi	05.2012	3
Test scheduler CPS-24Xi	05.2012	2
CPS-24-00	26.02.2001	1
CPS-24-SV-01	18.05.2012	1
CPS-24-SZ-01	18.05.2012	1
CPS-24-OS-01	18.05.2012	1
CPS-24-HP-01	18.05.2012	1
CPS-24-HP-02	18.05.2012	1
CPS-24-MO-01	18.05.2012	1
CPS-24-SS-01	18.05.2012	1
CPS-24-OD-01	27.07.2017	1

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 03.08.2017

Page: 2/2

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(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 02 ATEX 0233X

(4) Equipment or protective system: **Capacitive proximity sensor CPS-24Xi-_-_-**

(5) Manufacturer: **Dinel, s.r.o.**

(6) Address: **U Tescomy 249, 760 01 Zlín, Czech Republic**

(7) This supplement of certificate is valid for: - application of new standards
- prolongation of certificate validity
- 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 60079-0:2009, EN 60079-11:2012, EN 60079-26:2007

(11) Marking of equipment shall contain symbols:

 **II 1G Ex ia IIC T6 Ga**

(12) This type examination certificate is valid till: **16.08.2017**

Responsible person:

Đipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 16.08.2012

Page: 1/3

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Physical Technical Testing Institute
Ostrava – Radvanice

(13)

Schedule

(14)

Supplement No. 3 to
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0233X

(15) Description of Equipment or Protective System:

Decreasing of input capacitance: $C_1 = 15 \text{ nF}$

Other technical parameters and construction of apparatus remain unchanged.

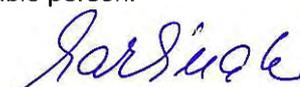
(16) Report No.: 02/0233/3

(17) Special conditions for safe use: remain unchanged

(18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by the standards mentioned in clause (10) of this supplement according which the new model was verified and in the manufacturer's Instruction for Using.

Responsible person:


Dípl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 16.08.2012

Page: 2/3

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Physical Technical Testing Institute
Ostrava – Radvanice

(13)

Schedule

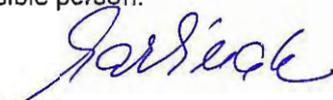
(14)

Supplement No. 3 to
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0233X

(19) List of Documentation:

<i>Document name/Drawings:</i>	<i>Date:</i>	<i>Nr. of Pages:</i>
Production documentation CPS-24Xi	05.2012	3
Test scheduler CPS-24Xi	05.2012	2
Technical conditions CPS-24	05.2012	10
Manual	05.2012	4
CPS-24-00	26.02.2001	1
CPS-24-SV-01	18.05.2012	1
CPS-24-SZ-01	18.05.2012	1
CPS-24-OS-01	18.05.2012	1
CPS-24-HP-01	18.05.2012	1
CPS-24-HP-02	18.05.2012	1
CPS-24-MO-01	18.05.2012	1
CPS-24-SS-01	18.05.2012	1
CPS-24-OD-01	18.05.2012	1

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 16.08.2012

Page: 3/3

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(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 02 ATEX 0233X

(4) Equipment or protective system: **Capacitive proximity sensor CPS-24Xi-_-**

(5) Manufacturer: **Dinel, s.r.o.,**

(6) Address: **U Tescomy 249, 760 01 Zlín, Czech Republic**

(7) This supplement of certificate is valid for: - 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 60079-11:2007; EN 60079-25:2004

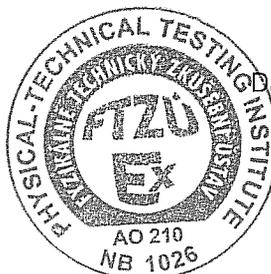
(11) Marking of equipment shall contain symbols:

 **II 1G Ex ia IIC T6**

(12) This type examination certificate is valid till: **16. 08. 2012**

Responsible person:

Dipl. Ing. Sindler Jaroslav
Head of certification body



Date of issue: 16.08.2007



Number of pages: 3
Page: 1/3

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Physical Technical Testing Institute
Ostrava-Radvanice

(13) **Schedule**

(14) **Supplement No. 2 to
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0233X**

(15) Description of Equipment or Protective System:

The validity of the certificate has been prolonged till 16.08.2012. The certified device is manufactured according to the verified documentation shown in the basic certificate, supplement No. 1 and this supplement No. 2.

Technical parameters remain valid, only $P_i = 45$ mW was modified.

(16) Report No. : 02/0233-2 (4 pages)

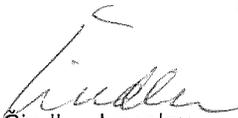
(17) Special conditions for safe use: remain valid

(18) Essential Health and Safety Requirements: remain valid

Responsible person:



Date of issue: 15.08.2007


Dipl. Ing. Sindler Jaroslav
Head of certification body

Page: 2/3

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Physical Technical Testing Institute
Ostrava-Radvanice

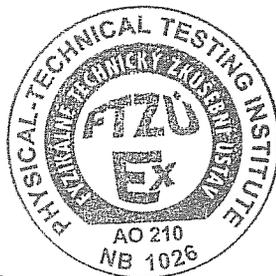
(13) **Schedule**

(14) **Supplement No. 2 to
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0233X**

(19) **LIST OF DOCUMENTATION**

<i>Documentation:</i>	<i>Date of verification:</i>
1. Instruction for use CPS-24 (4 pages)	14.08.2007
2. Technical conditions CPS-24 (10 pages)	14.08.2007
3. Drawing label	14.08.2007

Responsible person:



Date of issue: 16.08.2007


Dipl. Ing. Sindler Jaroslav
Head of certification body

Page: 3/3

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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 02 ATEX 0233X

(4) Equipment or protective system: **Capacitive proximity sensor CPS-24Xi- _ _**

(5) Manufacturer: **DINEL, s.r.o.,**

(6) Address: **U Tescomy 249, 760 01 Zlín, Czech Republic**

(7) This supplement of certificate is valid for: **modification of certified product**

(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 other 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:

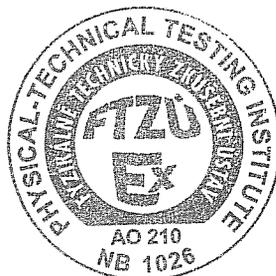
EN 50020:2002

(11) Marking of equipment shall contain symbols:

 **II 1G EEx ia IIC T6**

(12) This type examination certificate (with supplement) is valid till: **21. 08. 2007**

Responsible person:



Date of issue: **30.03.2006**


Dipl. Ing. Šindler Jaroslav

Head of certification body

Number of pages: **3**

Page: **1/3**

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Physical Technical Testing Institute
Ostrava-Radvanice

(13)

Schedule

(14)

Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0233X

(15) Description of Equipment or Protective System:

The sensor encapsulant was changed and also production documentation was changed. These changes have no influence to safety of sensor.

(16) Report No. : 02/0233-1 (2 pages)

(17) Special conditions for safe use: -

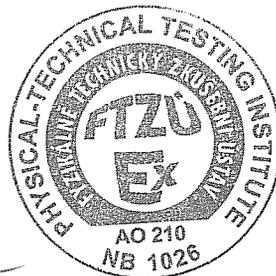
Remain valid

(18) Essential Health and Safety Requirements:

Remain valid.

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 30.03. 2006

Page: 2/3

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Physical Technical Testing Institute
Ostrava-Radvanice

(13)

Schedule

(14)

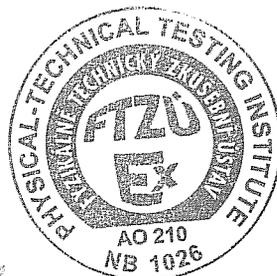
Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 02 ATEX 0223X

(19)

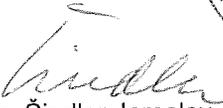
LIST OF DOCUMENTATION

- | | |
|--|---------|
| 1. Production documentation CPS-24Xi (3 pages) | 01/2006 |
| 2. Test schedule CPS-24Xi (2 pages) | 01/2006 |

Responsible person:



Date of issue: 30.03. 2006


Dipl. Ing. Šindler Jaroslav

Head of certification body

Page: 3/3

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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 02 ATEX 0233X

- (4) Equipment or protective system: **Capacitive proximity sensor CPS-24Xi-_-__**
- (5) Manufacturer: **DINEL, s.r.o.,**
- (6) Address: **Na Výsluní 541, 760 01 Zlín, Czech republic**
- (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°

02/0233 dated 20 August 2002

- (9) Compliance with Essential Health and safety requirements has been assured by compliance with:
EN 50014:1997 + A1, + A2; EN 50020:1994; EN 50284:1999
- (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 1G EEx ia IIC T6**

This EC-Type Examination Certificate is valid till: **21 of August 2007**

Responsible person:

Date of issue: 21 of August 2002


Dipl. Ing. Šindler Jaroslav
Head of certification body



Number of pages: 3
Page: 1/3

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Physical Technical Testing Institute
Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 02 ATEX 0233X**

(15) Description of Equipment or Protective System:

Capacitive proximity sensor type CPS – 24Xi-_-__ is designed for detection of approach or evaluation of solid objects movement, indication of level state (liquids, granulate, powders) in electric non-conductive vessels and level indicators and for indication of liquids leakage. It is placed in steel cylindrical housing, either with permanently connected cable or with output connector.

Maximum input parameters: $U_i = 12 \text{ V}$; $I_i = 15 \text{ mA}$; $P_i = 30 \text{ mW}$
internal inductance $L_i = 10 \mu\text{H}$ and internal capacitance $C_i = 60 \text{ nF}$.

(16) Report No. : 02/0233 (31 pages)

(17) Special conditions for safe use: -

17.1 The apparatus is designed to be connected with supply unit type SNSU-811 a DNSU-822.

17.2 If some other approved apparatus is used, its output parameters comply with above mentioned parameters, then it is necessary to include galvanic separation and/or in a case of application of apparatus without galvanic separation (Zener safety barriers) it is necessary to provide equipotential equalisation between sensor and point of barrier earthing.

17.3 For zone 0 application the present potentially explosive atmosphere of air mixture with gases, mists or vapours shall comply the following:

$$-20 \text{ °C} \leq T_{\text{amb}} \leq 60 \text{ °C}$$

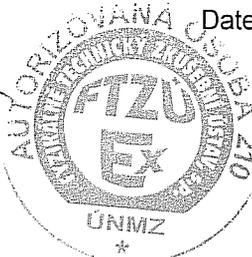
$$0,8 \text{ bar} \leq p \leq 1,1 \text{ bar}$$

(18) Essential Health and Safety Requirements:

Covered by standards mentioned in (9).

Responsible person:


Dipl. Ing. Šindler Jaroslav
Head of certification body



Date of issue: 21 of August 2002

Page: 2/3

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**Physical Technical Testing Institute
Ostrava-Radvanice**

(13) **Schedule**

(14) **EC-Type Examination Certificate N° FTZÚ 02 ATEX 0233X**

(19) **LIST OF DOCUMENTATION**

1. Certificate FTZÚ 01 Ex 0210X (3 pages) on 27.03.2001
2. Technical specification (10 pages) 06 / 2002
3. Test schedule (2 pages) 06 / 2002
4. Production documentation (3 pages + annexes 1 to 13) 06 / 2002
Annex 1: Wiring diagram CPS-24Xi-_-R_
Annex 2: Layout diagram and trace of printed board circuit CPS-24Xi-_-R_ (component side)
Annex 3: Layout diagram and trace of printed board circuit CPS-24Xi-_-R_ (joints side)
Annex 6: Component list CPS-24Xi-_-R-
Annex 7: Text of plate CPS-24_-_-_
Drawing CPS-24-00 on 10.08.2001
5. User manual verified on 19.08.2002