Physical-Technical Testing Institute
Ostrava - Radvanice

(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 Certificate number:

FTZÚ 12 ATEX 0106X

(4) Product: **Capacity level transducer type CLS–23Xi (XiT)**

(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 12 ATEX 0106X 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:

See clause (15)

(12) This certificate is valid till: **30.11.2027**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex NB 1026

Date of issue: 26.08.2022

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
tel.: +420 595 223 111, +420 604 203 525, e-mail: ftzu@ftzu.cz, www.ftzu.cz

(13) **Schedule**

(14) # Supplementary EU - Type Examination Certificate No. 2 to FTZÚ 12 ATEX 0106X

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Modification of Ex marking;
- Modification of Technical parameters;
- Specific Conditions of Use were modified;
- Evaluation according to the newest standards;
- 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).

Product marking according to the variant and electrode type:

II 1/2G Ex ia IIC T6...T3 Ga/Gb	CLS-23Xi-10 (30), CLS-23 XiT-10 (30)
II 1G Ex ia IIB T6...T3 Ga	CLS-23Xi-11 (12, 20, 21)
II 1/2G Ex ia IIB T6...T3 Ga/Gb	CLS-23XiT-12 (20, 21)

Technical parameters: (updated)

Ambient temperature for head part of the product:

CLS-23 Xi-11: $-10\ ^{o}C \leq T_a \leq +75\ ^{o}C$.

All other Variants: $-20\ ^{o}C \leq T_a \leq +75\ ^{o}C$.

Ambient temperature of sensor part of product: T_m – measured process media temperature, see specific condition of use no. 3.

Intrinsically safe parameters: (updated)

Power supply: Ui = 12 V, Ii = 15 mA, Pi = 45 mW, Ci = 180 nF, Li = 10 µH

Parameter Ci was changed from Ci = 15 nF to Ci = 180 nF and definition of ambient temperature was extended.

(16) Report Number: 12/0106/2

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex NB 1026

Date of issue: 26.08.2022

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(13) **Schedule**

(14) # Supplementary EU - Type Examination Certificate No. 2 to FTZÚ 12 ATEX 0106X

(17) Specific Conditions of Use: (modified point no. 3)

1. If the apparatus is used with an approved power supply device, which output parameters comply with required input parameters, it is necessary to have a galvanic separation or in a case of apparatus without galvanic separation (Zener barriers) it is necessary to provide equipotential equalisation between sensor and barrier earthing point.
2. Variant CLS-23Xi-11 (12, 20, 21) can be used in zone 0. For other variants only electrode part can be used in zone 0, head part with electronics can be used only in zone 1
3. Temperature class (T6…T3) depends on the process media temperature (T_m):

   Process media temperature (T_m) range in relation to electrode type:

   Variants CLS-23Xi:

Electrode types 10, 12	-25 °C ≤ T_m ≤ +105 °C
Type 11	-10 °C ≤ T_m ≤ +105 °C
Types 20, 21, 30	-30 °C ≤ T_m ≤ +150 °C

   Variants CLS-23XiT:

Types 10, 12, 20, 21, 30	-30 °C ≤ T_m ≤ +150 °C

   Temperature class for respective maximal process media temperature (T_{m_max}):

   T3 … for T_{m_max} = 150 °C.
   T4 … for T_{m_max} = 125 °C.
   T5 … for T_{m_max} = 90 °C.
   T6 … for T_{m_max} = 75 °C.

(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:
--	08.2022	14	08.2022	Technical conditions DLS-27
--	06.2022	24	06.2022	User's manual
CLS-23-OD-03	21.07.2022	1	21.07.2022	Label

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

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

Date of issue: 26.08.2022

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
tel.: +420 595 223 111, +420 604 203 525, e-mail: ftzu@ftzu.cz, www.ftzu.cz

Physical-Technical Testing Institute
Ostrava - Radvanice

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

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

(3) EU - Type Examination Certificate number:

FTZÚ 12 ATEX 0106X

(4) Product: **Capacity level transducer CLS-23Xi (XiT)**

(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 12 ATEX 0106X 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:

II 1/2G	**Ex ia IIC T6 Ga/Gb**	CLS-23Xi-10 (30), CLS-23XiT-10 (30)
II 1G	**Ex ia IIB T6 Ga**	CLS-23Xi-11 (12, 20, 21)
II 1/2G	**Ex ia IIB T6 Ga/Gb**	CLS-23XiT-11 (12, 20, 21)

(12) This certificate is valid till: **30.11.2022**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ AO 210 NB 1026

Date of issue: 27.10.2017

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. 1 to FTZÚ 12 ATEX 0106X

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

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

Intrinsically safe parameters and mechanical construction remain without changes.

(16) Report Number.: 12/0106/01

(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.

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ AO 210 NB 1026

Date of issue: 27.10.2017

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(13) **Schedule**

(14) # Supplementary EU - Type Examination Certificate No. 1 to FTZÚ 12 ATEX 0106X

(19) Drawings and Documents:

Document/Drawings:	*Date:*	*Nr. of pages:*
User manual	06.2017	24
Production documentation CLS-23Xi	05.2012	4
Technical conditions CLS-23	05.2012	13
Test scheduler CLS-23Xi	05.2012	2
CLS-23-SZ-03	07.06.2016	1
CLS-23-OS-01	07.06.2016	1
CLS-23-HP-05	07.06.2016	1
CLS-23-HP-06	07.06.2016	1
CLS-23-MO-01	07.06.2016	1
CLS-23-SS-03	07.06.2016	1
CLS-23-OD-03	25.06.2013	1
CLS-23-SV-01	07.06.2016	1
CLS-23-100	28.06.2017	1
CLS-23-200	28.06.2017	1
CLS-23-300	28.06.2017	1
CLS-23-400	28.06.2017	1
CLS-23-500	28.06.2017	1
CLS-23-700	28.06.2017	1

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ AO 210 NB 1026

Date of issue: 27.10.2017

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

(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 12 ATEX 0106X

(4) Equipment or protective system: **Capacity level transducer CLS-23Xi (XiT)**

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

(6) Address: **U Tescomy 249, 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°:

12/0106 dated 28.11.2012

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

EN 60079-0:2009 EN 60079-11:2012, EN 60079-26:2007

(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 following:

II 1/2G	**Ex ia IIC T6 Ga/Gb**	CLS-23Xi-10 (30), CLS-23XiT-10 (30)
II 1G	**Ex ia IIB T6 Ga**	CLS-23Xi-11 (12, 20, 21)
II 1/2G	**Ex ia IIB T6 Ga/Gb**	CLS-23XiT-11 (12, 20, 21)

This EC-Type Examination Certificate is valid till: **28.11.2017**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

Date of issue:28.11.2012

FTZÚ, 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) EC-Type Examination Certificate N° FTZÚ 12 ATEX 0106X

(15) Description of Equipment or Protective System:
Capacity level transducer CLS-23Xi(XiT) is designed to the industrial using in the explosive atmospheres for indication of level of various types of electrically conductive and nonconductive liquids.

The apparatus consist of plastic and stainless-steel enclosure, sensing electrode and it is finished by cable gland with cable by conector. Electronics is placed into enclosure. The type of output is NAMUR. On the back side of apparatus the indication LED is placed.

Produced models:

According external connection of supply
- CLS-23Xi(XiT)-_-A-_ _ - plastic cable gland short
- CLS-23Xi(XiT)-_-B-_ _ - plastic cable gland long
- CLS-23Xi(XiT)-_-C-_ _ - conector M12x1 Hirschman approwed types

According used electrodes
- CLS-23Xi(XiT)-10-_-_-_ - cylindric electrode without insulation, length 30mm
- CLS-23Xi(XiT)-11-_-_-_ - cylindric electrode with PP insulation, length 30mm
- CLS-23Xi(XiT)-12-_-_-_ - cylindric electrode with FEP insulation, length 30mm
- CLS-23Xi(XiT)-20-_-_-_ - rod electrode with partial FEP insulation, length 50-1000mm
- CLS-23Xi(XiT)-21-_-_-_ - rod electrode with full FEP insulation, length 50-1000mm
- CLS-23Xi(XiT)-30-_-_-_ - rod removable electorde without insulation, length 50-1000mm

According procedural connection
- CLS-23Xi(XiT)-_-_-_-G3/8 – pipe thread G3/8"
- CLS-23Xi(XiT)-_-_-_-G1/2 - pipe thread G1/2"
- CLS-23Xi(XiT)-_-_-_-M18 - metric thread M18x1,5
- CLS-23Xi(XiT)-_-_-_-M20 - metric thread M20x1,5
- CLS-23Xi(XiT)-_-_-_-NPT – pressure thread ½-14 NPT

Types of connectors Hirschmann: ELWIKA 4012 K PG7, ELKA 4012 K PG7, ELWIKA-KV 4312 (EWF 123, RKWT 4-3-06) with cable of length 2m or 5m

Intrinsically safe parameters:
Power supply: U_i = 12 V, I_i = 15 mA, , P_i = 45 mW, C_i = 15 nF, L_i = 10 µH.

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex AO 210 NB 1026

Date of issue:28.11.2012

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(13) **Schedule**

(14) EC-Type Examination Certificate N° FTZÚ 12 ATEX 0106X

(16) Report No.: 12/0106

(17) Special conditions for safe use: none

17.1 If the apparatus is used with an approved power supply device, which output parameters comply with required input parameters, it is necessary to have an galvanic separation or in a case of apparatus without galvanic separation (Zener barriers) it is necessary to provide equipotential equalizing between sensor and barrier earthing point.

17.2 Design CLS-23Xi-11 (12, 20, 21) can be used in zone 0. With other design apparatus can be used in zone 0 only electrode part and head with electronics can be used only in zone 1.

17.3 Ambient temperature: T_{amb} = - 20°C to +75°C

Temperature of measured medium according to design variant:

Xi type 10, 12	(- 25°C to + 105°C)
Xi type 11	(- 10°C to + 105°C)
Xi- type 20, 21, 30, XiT	(- 30°C to + 150°C)

Maximum temperature of electrodes is equal to temperature of measured medium.

(18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by the standard mentioned in (9), according which the product was verified and in the manufacturer's instruction for use.

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex AO 210 NB 1026

Date of issue:28.11.2012

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(13) **Schedule**

(14) EC-Type Examination Certificate N° FTZÚ 12 ATEX 0106X

(19) List of Documentation:

Document/Drawings:	*Date:*	*Nr. of Pages:*
Production documentation CLS-23Xi	05.2012	4
Technical conditions CLS-23	05.2012	13
Test scheduler CLS-23Xi	05.2012	2
User manual	05.2012	8
General technical instructions - Polyurethane casting compounds	11.2010	3
CLS-23-100	18.05.2012	1
CLS-23-200	18.05.2012	1
CLS-23-300	21.05.2012	1
CLS-23-400	21.05.2012	1
CLS-23-500	21.05.2012	1
CLS-23-600	21.05.2012	1
CLS-23-700	18.05.2012	1
CLS-23-SV-01	05.03.2012	1
CLS-23-SZ-03	15.05.2012	1
CLS-23-OS-03	15.05.2012	1
CLS-23-OS-02	16.05.2012	1
CLS-23-HP-05	15.05.2012	1
CLS-23-HP-06	15.05.2012	1
CLS-23-MO-01	15.05.2012	1
CLS-23-SS-03	15.05.2012	1
CLS-23-OD-03	15.05.2012	1

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

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

Date of issue:28.11.2012

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