



Physical-Technical Testing Institute
Ostrava - Radvanice



(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 07 ATEX 0105X

(4) Product: **Landfill gas monitoring type GasClam**

(5) Manufacturer: **Elok-Opava spol. s r.o.**

(6) Address: **Sádek 17, 747 75 Velké Heraltice, Czech Republic**

(7) This supplementary certificate extends EC - Type Examination Certificate No. FTZÚ 07 ATEX 0105X 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 60079-1:2014, EN 60079-11:2012

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

 **II 2G Ex db ib [ib] IIB T4 Gb**

(12) This certificate is valid till: **30.09.2023**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 25.09.2018

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This certificate is granted subject to the general conditions of the FTZÚ, s.p.
This certificate may only be reproduced in its entirety and without any change, schedule included.



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Schedule

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(14) **Supplementary EU - Type Examination Certificate No. 5
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(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Modification of certified apparatus;
- Change of technical parameters;
- Evaluation according to the newest standards;
- Change of Ex marking;
- Prolongation of certificate validity.

This supplementary certificate describes the changes of intrinsically safe circuits into product. The product was evaluated according actual valid standards. The validity of certificate was prolonged for next five years. The list of actualized documents is listed in the point (19) of this supplementary certificate.

Technical parameters: were changed

$U_n = 3..12$ V DC, $P_n = 1.5$ W,

Degree of protection: IP 68 for flameproof enclosure part.
IP20 for an intrinsically safe part

Intrinsically safe parameters:

Maximal input/output parameters:

Water level connector: $U_o = 16.8$ V, $I_o = 0.129$ A, $P_o = 0.54$ W, $L_o = 0.3$ mH, $C_o = 1$ μ F;

Communication connector:

Status LED: $U_o = 6.58$ V, $I_o = 0.018$ A, $P_o = 0.03$ W, $L_o = 0.3$ mH, $C_o = 1$ μ F;

PC RxD a PC TxD: $U_o = 6.58$ V, $I_o = 0.018$ A, $P_o = 0.03$ W, $L_o = 0.3$ mH, $C_o = 1$ μ F;

PC RxD: $U_i = 15.8$ V, $L_i = 1$ μ H, $C_i = 0.6$ μ F;

Water proximity detector: $U_o = 6.58$ V, $I_o = 0.003$ A, $P_o = 0.005$ W; $C_o = 450$ μ F; $L_o = 10$ mH

Output for connection - communication connector: PC RxD a PC TxD: $U_m = 15.8$ V;

External power supply with this parameters: $U_i = 15.8$ V, $I_i = 0.66$ A, $P_i = 10.43$ W, $L_i = 0$ μ H, $C_i = 0$ μ F.

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(16) Report Number.: 07/0105/5

(17) Specific Conditions of Use:

1. Tamb: -20°C to +50°C supply voltage 2x 1.5 V alkaline battery Duracell Ultra M3 MN 1300, Li72-170F, Li72-190F.
2. Tamb: -10°C to +40°C supply voltage 2x 1.2 V accumulator Saft D 9500.
3. Batteries or accumulators can be changed only in non explosive atmosphere.
4. Download of measured data can be carried out only with explosion proof device with correspond input/output parameters or with unit out of hazardous atmosphere.
5. Battery must be removed before connecting external power.
6. Verified values of the maximum gaps and minimum constructional length of flameproof joints of this enclosure are different from relevant minimum and maximum values mentioned in standard. To obtain information about joints dimension it is necessary to contact the manufacturer.
7. For the assembly of the parts of flame proof enclosure fasteners with a minimum property class 8.8 shall be used.

(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.

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(19) Drawings and Documents:

Drawing No.:	Revision:	Sheets:	Date:	Title:
DTE201800782/A	-	13	05.2018	List and analysis of changes
Ex 02600-00-005	B	2	09.2015	The assembly drawing
Ex 02600-00-W90	D	1	06.2014	Production label
NKO 201400347	D	11	06.2018	User's manual
NKO 201400348	E	12	09.2018	User's manual EN
Ex 02600-62-001,BS	A	1	08.2018	Block diagram
02600-50-002	E	10	08.2018	GasClam C.2
02600-51-002	E	12	04.2018	GasClam P.2
02600-52-003	D	9	08.2018	GasClam M.2
02600-53-001	A	1	07.2011	Start button
Ex 02600-11-001	A	1	10.2014	Battery pack
Ex 02600-12-001	A	1	10.2014	Battery pack
Ex 02600-00-006	A	2	02.2018	The assembly drawing
Ex 02600-00-I90	A	1	02.2018	Label
Ex 02600-00-091	F	1	09.2018	Data label
Ex 02600-41-001	A	1	09.2018	Communication cable

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