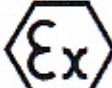





G I G




- [1] **EU-TYPE EXAMINATION CERTIFICATE**
- [2] Equipment and protective systems intended for use in potentially explosive atmospheres. Directive 2014/34/EU
- [3] EU – type examination certificate (module B):
KDB 11ATEX140X **issue 1**
- [4] Equipment:
Smart level probes type: SG-25.SMART, SG-25S.SMART, SG-25C.SMART, SGE-25.SMART, SGE-25S.SMART, SGE-25C.SMART
Smart level probe with pressure transmitter type: SGP-21.1
Smart level probe type: SG-21, SG-21S, SG-21C
Fuel level probe type CS-27Ex
- [5] Manufacturer:
APLISENS S.A.
- [6] Address:
ul. Morelowa 7, 03-192 Warszawa, POLAND
- [7] This product and any acceptable variation thereto is specified in the schedule to this certificate.
- [8] Główny Instytut Górnictwa, Notified Body number 1453 in accordance with Directive 2014/34/EU of 26 February 2014, 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 2014/34/EU. The examination and test results are recorded in confidential report **KDB Nr 11.235-2 [T-6833]**
- [9] Compliance with the Essential Health and Safety Requirements has been met by compliance with:
EN 60079-0:2012 + A11:2013; EN 60079-11:2012; EN 50303:2000
- [10] In case if the sign „X“ is placed after the certificate number, it indicates special conditions for safe use, specified in the schedule to this certificate.
- [11] This EU-type examination certificate relates only to the construction, evaluation and tests of product accordance with Directive 2014/34/EU. The certificate does not include other requirements of the Directive relating to manufacturing process and putting into the market of the equipment or protective device.
- [12] Marking of the equipment shall include:

 **II 1/2G Ex ia IIB T4/T5/T6 Ga/Gb**

or

 **I M1 Ex ia I Ma**
II 1G Ex ia IIC T4/T5/T6 Ga

or

 **I M1 Ex ia I Ma**
II 1G Ex ia IIB T4/T5/T6 Ga

mgr inż. Piotr Madej

ATEX Certification
Specialist



KIEROWNIK
Zespołu Certyfikacji Wyrobów
KD "BARBARA" Mikołów
dr hab. inż. Krzysztof Cymbulski, prof. GIG

Date of issue: **24.04.2017 r.**

Date of English version: **24.04.2017 r.**

Page 1 of 3

Główny Instytut Górnictwa, 40-166 Katowice, Plac Gwarków 1, POLAND, www.gig.eu
(Certification Body-Certification Team-Kopalnia Doświadczalna "Barbara" Mikołów)
Certification Body accredited by PCA, Nr AC038

This certificate may be reproduced only in its entirety with schedule. The next issue of the certificate replaces the earlier editions.
Issue 0 is the initial certification. The document without signatures and seals is invalid.

PC/CM-ATEX-01/ExXen ed. 02.2016



KDBEX.eu

[13]
[14]

SCHEDULE
EU-type Examination Certificate
KDB 11ATEX140X issue 1



[15] Description:

The smart level probes SG-21 are designed to measure the depth of liquid in wells, tanks, watercourses, boreholes.

Smart level probes with pressure transmitters SGP-21.1 are designed to measure the pressure inside the pipeline and the level outside the pipeline.

Smart level probes type SG-25.SMART, SG-25S.SMART, SG-25C.SMART, SGE-25.SMART, SGE-25S.SMART, SGE-25C.SMART are designed to measure the depth of liquid in wells, tanks, watercourses, boreholes etc.

Fuel level probe type CS-27Ex are designed to measure the level of fuel in vehicles, machinery and locomotives.

The electronic system digitally processes the measurement signal and generates output signals an analogue 4÷20 mA signal, and a digital Hart communication signal. The main electronic assembly is identical for all versions. The main electronic assembly is encapsulated in a steel casing.

Probes are manufactured with a cable permanently connected to it. Special versions of the probes can be produced with cables shielded by Teflon i. e. cables with ETFE outer jacket or shielded by an additional PTFE layer.

Marking:

Marking of the fuel level probes CS-27Ex:

II 1/2G Ex ia IIB T4/T5/T6 Ga/Gb

Marking of the probes with cables shielded by a teflon layer.

I M1 Ex ia I Ma
 II 1G Ex ia IIB T4/T5/T6 Ga

Marking of the other probes:

I M1 Ex ia I Ma
 II 1G Ex ia IIC T4/T5/T6 Ga

Technical parameters:

Supply voltage	7,5 V ÷ 30 V DC (24 VDC nominal voltage)
Measurement range	Max. 250 mH ₂ O (for SGP-21.1, SG-21) Max. 10 mH ₂ O (for SG-25C.SMART, SGE-25C.SMART) Max. 100 mH ₂ O (for SG-25.SMART, SG-25S.SMART, SGE-25.SMART, SGE-25S.SMART) Max. 1 mH ₂ O (for CS-27Ex)
Output signal	4 ÷ 20 mA + HART
Ingress protection	IP68
Ambient temperature	-30°C ÷ +80°C



[13]
[14]

SCHEDULE
EU-type Examination Certificate
KDB 11ATEX140X issue 1



Intrinsic safety parameters:

Supply from a power source with linear output characteristic:
 $U_i = 30 \text{ V}; I_i = 0,1 \text{ A}$

Supply from a power source with rectangular or trapezoidal output characteristic:
 $U_i = 24 \text{ V}; I_i = 0,1 \text{ A}$

$C_i = 11 \text{ nF}; L_i = 0,611 \text{ mH}, C_k = 0,2 \text{ nF/m}, L_k = 1 \text{ }\mu\text{H/m}$

P_i [W]	T_a [°C]	Temperature classification
0.75	50	T6
	70	T5
	80	T4, group I
1.2	40	T6
	65	T5
	80	T4, group I

[16] Test report:

„Sprawozdanie z oceny ATEX” KDB Nr 11.235-2

[17] Special conditions for safe use:

- Version of transmitter with surge arrester, marked on the plate "Version SA", does not meet the requirements of Section 10.3 of the EN 60079-11 (500 Vrms). The relevant information for the user is included in the manual;

[18] Essential health and safety requirements:

Met by compliance with standards listed below:

EN 60079-0:2012 + A11:2013; EN 60079-11:2012; EN 50303:2000
(PN-EN 60079-0:2013-03 + A11:2014-03; PN-EN 60079-11:2012;
PN-EN 50303:2004)

Document's history:

- EC-Type Examination Certificate KDB 11ATEX140X of 12.12.2011 r. with all supplements, initial certification (issue 0).
- EU-Type Examination Certificate KDB 11ATEX140X issue 1, **this document**, the MPC3-rev6.12_N plate assembly was replaced with the MPC3-rev7_N plate assembly. The new alternative casting compound has been introduced. The new CS-27Ex probe has been introduced. The pattern plate has been changed.

