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 11 ATEX 0116X

(4) Equipment or protective system: **Pressure Transmitter type APC-2000ALW/XX Safety, and Differential Pressure Transmitters type APR-2000ALW/XX Safety**

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

(6) Address: **ul. Morelowa 7, 03-192 Warszawa, 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°

**11/0116 dated 27.06.2011**

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

**EN 60079-0 : 2009; EN 60079-11 : 2007; EN 60079-26 : 2007, EN 61241-11:2006, EN 50303:2000**

(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 T5/T6 Ga/Gb**

**II 1D Ex ia IIIC T105°C Da**

**I M1 Ex ia I Ma** (version with enclosure ss316)

This EC-Type Examination Certificate is valid till: **29.06.2016**

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body

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

Date of issue: 29.06.2011

Number of pages: 4

Page: 1/4



FTZÚ, Pikartská 7, 716 07 Ostrava Radvanice, tel +420 596 232 715, fax +420 596 232 672, e-mail: ftzu@ftzu.cz

(13) **Schedule**

# (14) EC-Type Examination Certificate N° FTZÚ 11 ATEX 0116X

(15) Description of Equipment or Protective System:

The Pressure Transmitter type APC-2000ALW/XX Safety and Differential Pressure Transmitters type APR-2000ALW/XX Safety are designed to convert process pressure measurements into a 4 to 20 mA current signal. The apparatus comprises several printed circuit boards and a liquid crystal display all housed in a metal enclosure which can be made of light alloy for Group II and Group III applications but only stainless steel for mine (Group I) application. One of the housing cover contains the window made of polycarbonate. External connections are made via an integral terminal block. The transmitters are produced in versions with and without the mounted surge arresters.
The transmitters are allowed to be installed into the partition between the hazardous areas of category 1G and category 2G.

***Input parameters:***

Linear power supply output characteristic:
$U_i$ = 28 V; $I_i$ = 0,1 A; $P_i$ = 0,7 W; $C_i$ = 30 nF; $L_i$ = 1,35 mH - temperature class T5
Range of permissible ambient temperature: $T_a$ = - 40°C to + 70°C
$U_i$ = 28 V; $I_i$ = 0,1 A; $P_i$ = 0,4 W; $C_i$ = 30 nF; $L_i$ = 1,35 mH - temperature class T6
Range of permissible ambient temperature: $T_a$ = - 40°C to + 40°C
Trapezoidal power supply output characteristic:
$U_i$ = 24 V; $I_i$ = 50 mA; $P_i$ = 0,6 W; $C_i$ = 30 nF; $L_i$ = 1,35 mH - temperature class T5
Range of permissible ambient temperature: $T_a$ = - 40°C to + 80°C
Rectangular power supply output characteristic:
$U_i$ = 24 V; Ii =25mA, $P_i$ = 0,6 W; $C_i$ = 30 nF; $L_i$ = 1,35 mH - temperature class T5
Range of permissible ambient temperature: $T_a$ = - 40°C to + 80°C

Range of permissible ambient temperature: $T_a$ = - 40°C to + 80°C - category M1 and 1D

(16) Report No.: 11/0166

(17) Special conditions for safe use:

Version of device with surge arrester does not meet the 500V rms test required by EN 60079-11:2007. This must be taken into account when installing the device.

(18) Essential Health and Safety Requirements:

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

Responsible person:

Dipl. Ing. Šindler Jaroslav
Head of certification body

Date of issue: 29.06.2011

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ-TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210





FTZÚ, Pikartská 7, 716 07 Ostrava Radvanice, tel +420 596 232 715, fax +420 596 232 672, e-mail: ftzu@ftzu.cz

(13) **Schedule**

(14) **EC-Type Examination Certificate N° FTZÚ 11 ATEX 0116X**

(19) **LIST OF DOCUMENTATION**

| | *Documentation:* | | *Date:* |
|---|---|---|---|
| 1. | Technical documentation | | 03/2011 |
| 2. | Drawings No.: | APC2000-A650-10 (1 sheet) | 03/2011 |
| | | APC2000-A650-11 (4 sheets) | 03/2011 |
| | | APC2000-C652-TA (4 sheets) | 03/2011 |
| | | APC2000-S651-02 (2 sheets) | 03/2011 |
| | | APC2000-S611-01 (1 sheet) | 12/2007 |
| | | APC2000-S611-01 (1 sheet) | 01/2010 |
| | | APC2000-B653-TA (3 sheets) | 03/2011 |
| | | APC2000-B652-02 (8 sheets) | 03/2011 |
| | | APC2000-B613-01 (2 sheets) | 12/2007 |
| | | APC2000-B613-01 (1 sheet) | 01/2010 |
| | | APC2000-B614-01 (2 sheets) | 12.2007 |
| | | APC2000-B614-01 (1 sheets) | 01/2010 |
| | | PC2000-B627-01 (2 sheets) | 09/2009 |
| | | APC2000-B615-01 (1 sheet) | 12/2007 |
| | | APC2000-B616-01 (1 sheet) | 12/2007 |
| | | APC2000-B617-01 (1 sheets) | 01/2010 |
| | | APC2000-B623-00 (1 sheet) | 12/2007 |
| | | APC2000-B624-00 (1 sheet) | 07/2009 |
| | | APC2000-A655-TA (4 sheets) | 03/2011 |
| | | APR2000-A656-TA (4 sheets) | 03/2011 |

Responsible person:

Date of issue: 29.06.2011

Dipl. Ing. Šindler Jaroslav
Head of certification body





FTZÚ, Pikartská 7, 716 07 Ostrava Radvanice, tel +420 596 232 715, fax +420 596 232 672, e-mail: ftzu@ftzu.cz

(13) **Schedule**

(14) **EC-Type Examination Certificate N° FTZÚ 11 ATEX 0116X**

(19) **LIST OF DOCUMENTATION**

| *Documentation:* | | *Date:* |
|---|---|---|
| 2. Drawings No.: | APC2000-B618-TA (2 sheets) | 01/2010 |
| | APC2000-B618-TA (1 sheet) | 03/2011 |
| | APR2000-B619-TA (4 sheets) | 01/2010 |
| | PC29-B012-02 (1 sheets) | 12/2010 |
| | PC29-B013-01 (1 sheets) | 10/2009 |
| | PC29-B014-01 (1 sheet) | 10/2009 |
| | APC2000-B622-00 (1 sheet) | 12/2007 |
| | APC2000-C612-00 (1 sheet) | 12/2007 |
| | ZA-027-TA (1 sheet) | 03/2011 |
| | ZG-002-TA (1 sheet) | 06/2007 |
| | ZG-006-TA (1 sheet) | 10/2004 |
| | EP-232-01 (1 sheet) | 02/2011 |
| | GC1-007-TA (3 sheets) | 01/2010 |
| | GC3-001-TA (1 sheet) | 10/2009 |
| | GC3-001-TA (2 sheets) | 01/2010 |
| | GC3-003-TA (2 sheets) | 01/2010 |
| | GC4-001-TA (3 sheets) | 01/2010 |
| | GC4-005-TA (3 sheets) | 01/2010 |
| | GR40-001-TA (2 sheet) | 09/2010 |
| | GR40-002-TA (1 sheet) | 03/2007 |
| | GR40-003-TA (1 sheet) | 12/2009 |

3. Analysis of EN requirements No.: AN.APC-2000ALW Safety.Ex (15 pages and 16 annexes) 03/2011

4. Instruction manual No.: DTR.APC.APR.ALW.10 03/2011

Responsible person:

Date of issue: 29.06.2011

Dipl. Ing. Šindler Jaroslav
Head of certification body





FTZÚ, Pikartská 7, 716 07 Ostrava Radvanice, tel +420 596 232 715, fax +420 596 232 672, e-mail: ftzu@ftzu.cz

**Physical Technical Testing Institute**
**Ostrava – Radvanice**

(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 11 ATEX 0116X

(4) Equipment or protective system: **Pressure Transmitter type APC-2000ALW/XX Safety, Differential Pressure Transmitter type APR-2000ALW/XX Safety**

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

(6) Address: **ul. Morelowa 7, 03-192 Warszawa, Poland**

(7) This supplement of certificate is valid for:
- application of new standards
- prolongation of certificate validity
- modification of apparatus name
- modification of certified apparatus

(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 60079-0:2012, EN 60079-11:2012, EN 60079-26:2007, EN 50303:2000**

(11) Marking of equipment shall contain symbols:

**II 1/2G Ex ia IIC T5/T6 Ga/Gb**
**II 1D Ex ia IIIC T105°C Da**
**I M1 Ex ia I Ma** version with enclosure ss316

(12) This type examination certificate is valid till: **11.05.2020**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ AO 210 NB 1026

Date of issue: 11.05.2015





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) # Supplement No. 1 to EC-Type Examination Certificate N° FTZÚ 11 ATEX 0116X

(15) Description of Equipment or Protective System:

Changed the name of apparatus from "Pressure Transmitter type APC-2000ALW/XX Safety" to "Pressure Transmitter type APC-2000ALW/XX Ex Safety" and "Differential Pressure Transmitters type APR-2000ALW/XX Safety" to "Differential Pressure Transmitters type APR-2000ALW/XX Ex Safety".

Introduced the housing side cover with the glued glass panel.

Minor changes in mechanical a electrical construction without influence to current level of safety

Other technical parameters and construction of apparatus remain unchanged.

(16) Report No.: 11/0116/1

(17) Special conditions for safe use:

17.1 Versions of transmitter with surge arrester marked on plate "SA", do not meet the requirements of Section 10.3 of the standard EN 60079-11:2012 (500Vrms). This must be taken into account when installing the equipment.

(18) Essential Health and Safety Requirements:

Essential health and safety requirements 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.

(19) List of Documentation:

| *Document/Drawings:* | *Type of sheet:* | *Date:* | *Nr. of pages:* |
|---|---|---|---|
| APC2000-A650-12 | 1 | 06.2014 | 1 |
| APC2000-A650-10 | 1A | 06.2014 | 3 |
| APC2000-C650-11 | 1A-4A | 06.2014 | 4 |
| APC2000-C652-TA | 1A-4A | 06.2014 | 4 |
| APC2000-S611-01 | 4B | 11.2012 | 1 |
| APC2000-B653-TA | 1A-3A | 06.2014 | 3 |
| APC2000-B614-01 | 3B | 01.2012 | 1 |
| APC2000-B627-01 | 2A | 01.2012 | 1 |
| APC2000-A655-TA | 1A-4A | 06.2014 | 4 |
| APC2000-A656-TA | 1A-4A | 06.2014 | 4 |
| DTR.APC.APR.ALW.20(ENG) | - | 10.2014 | 40 |

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex AO 210 NB 1026

Date of issue: 11.05.2015





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