



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX FTZU 14.0026X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 2 [Issue 1 \(2017-01-30\)](#)
[Issue 0 \(2015-03-09\)](#)
Date of Issue: 2022-08-04
Applicant: **APLISENS S.A.**
ul. Morelowa 7
03-192 Warszawa
Poland
Equipment: **Pressure Transmitter type APC-2000ALW/XX, Differential Pressure Transmitters type APR-2000ALW/XX, APR-2000ALW/GXX, APR-2000ALW/LXX, Level Probe type APR-2000YALW, Level Transmitter type APC-2000ALW/LXX and Density Transmitter type APR-2200ALW/D**
Optional accessory:
Type of Protection: **Intrinsic safety**
Marking: Ex ia I Ma (version with enclosure ss316)
Ex ia IIB T4/T5 Ga/Gb (version with teflon-shielded cable)
(version with PTFE covered separator)
Ex ia IIC T4/T5 Ga/Gb
Ex ia IIIC T115°C Da

Approved for issue on behalf of the IECEx
Certification Body:

Dipl. Ing. Martin Gregor

Position:

Vice Head of Certification Body

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

**Fyzikálne technický zkusební ústav
(Physical -Technical Testing Institute)
Pikartská 7, 71607 Ostrava - Radvanice
Czech Republic**





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Manufacturer: **APLISENS S.A.**
ul. Morelowa 7
03-192 Warszawa
Poland

Manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[CZ/FTZU/ExTR14.0026/00](#)

[CZ/FTZU/ExTR14.0026/01](#)

[CZ/FTZU/ExTR14.0026/02](#)

Quality Assessment Report:

[PL/KDB/QAR12.0001/05](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Pressure Transmitter type APC-2000ALW/XX, Differential Pressure Transmitters type APR-2000ALW/XX, APR-2000ALW/GXX, APR-2000ALW/LXX, Level Probe type APR-2000YALW, Level Transmitter type APC-2000ALW/LXX and Density Transmitter type APR-2200ALW/D are designed to convert process pressure measurements into a 4 to 20 mA current signal. The apparatus comprises a sensor, several printed circuit boards and a liquid crystal display all housed in a light alloy enclosure or stainless steel enclosure. One of the housing cover contains a window. In version with a sensor placed on a cable in the transmitter's type designation before a symbol of process connection is placed letter L e.g. APC-2000ALW/LXX. External connections are made via an integral terminal block.

Intrinsically safe input power supply parameters:

Linear power supply output characteristic:

$U_i = 30 \text{ V}$; $I_i = 0,1 \text{ A}$; $P_i = 0,75 \text{ W}$; temperature class T5

Trapezoidal power supply output characteristic:

$U_i = 24 \text{ V}$; $I_i = 50 \text{ mA}$; $P_i = 0,7 \text{ W}$; temperature class T5

Rectangular power supply output characteristic:

$U_i = 24 \text{ V}$; $I_i = 25 \text{ mA}$, $P_i = 0,6 \text{ W}$; temperature class T5

$U_i = 24 \text{ V}$; $I_i = 50 \text{ mA}$, $P_i = 1,2 \text{ W}$; temperature class T4

Intrinsically safe parameters

$C_i = 2,5 \text{ nF}$; $L_i = 18 \text{ }\mu\text{H}$,

Range of permissible ambient temperature : $T_a = - 50^\circ\text{C}$ to $+80^\circ\text{C}$ for Group II

Range of permissible ambient temperature : $T_a = - 40^\circ\text{C}$ to $+80^\circ\text{C}$ for Group I and III

SPECIFIC CONDITIONS OF USE: YES as shown below:

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.
2. Under certain extreme circumstances in dust explosive atmospheres, the device with painting of enclosure and with plastic tables and with elements of diaphragm seals covered by PTFE may store an ignition-capable level of electrostatic charge. The device shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge.
3. If the diaphragm seal contains titan parts, it must be protected against mechanical drops.
4. Galvanically separated part of apparatus placed into measuring head is electrically connected with mass of enclosure. It should be taken into account when installing the apparatus with remote measuring head on cable.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Renaming current type names: APR-2000GALW to APR-2000ALW/G;
APR-2200ALW to APR-2000ALW;
APR-2200ALW/L to APR-2000ALW/L

The surface temperature in dust explosive atmosphere is changed to 115° C.

Formerly marking Ex ia IIIC T105 °C Da is changed to Ex ia IIIC T115° C Da.

Changed these PCBs and components, MPC5-FHI-Exi-Exd-rev1 updated to rev2, MPC5-FHI-rev1-Ex removed, bushing assembly assembled with PCB MPC5-FHI-rev1-Ex, booth removed, differential pressure head GR40-001-TA removed, MPC5-rev1.2 removed, MPC5-rev3.002 added, MPC5-AD-rev6.0 added, culvert assembly assembled with PCB MPC5-FHI-Exi-Exd-rev2 added, differential pressure heads GR40-108-TA, GR40-109-TA added.

Change of "mass" mounting technology from screwed to solder.

Minor mechanical changes in construction of pressure heads.

There are minor changes in used electrical components and mechanical parts.

Added the possibility of 0.35 mm PTFE foil on diaphragm seal membrane, only for Group IIB.

Introduction of the cable in a Teflon tube braided with steel sheathing.

Introduced 5x7 steel sheathed cable

Updating and correction of documentation.