

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 11.0004X	Page 1 of 5	Certificate history

Status: Current Issue No: 4 Issue 3 (2016-06-10)

 Status:
 Current
 Issue No: 4
 Issue 2 (2012-03-16)

 Date of Issue:
 2018-11-30
 Issue 0 (2011-03-30)

Applicant: APLISENS S.A.

ul. Morelowa 7 03-192 Warszawa

Poland

Equipment: Pressure transmitters type: PC-29A/XX/YY, PC-29B/XX/YY, PC-29PA/YY, PC-29PB/YY, PC-29PB,

Differential pressure transmitters type: PR-29A/XX/YY, PR-29B/XX/YY, PR-29S, Hydrostatic level probe SG-25A

and SG-25B.

Optional accessory:

Type of Protection: Intrinsic safety

Marking: Ex ia I Ma

Ex ia IIC T4/T5/T6 Ga/Gb for PC-29..., PR-29... Ex ia IIB T4/T5/T6 Ga for SG-25A, SG-25B

Approved for issue on behalf of the IECEx Dipl. Ing. Lukáš Martinák

Certification Body:

Position: Head of Certification Body

Signature:

(for printed version)

Date:

- 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:

Fyzikalne technicky zkusebni ustav (Physical -Technical Testing Institute) Pikartska 7, 71607 Ostrava - Radvanice Czech Republic





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Manufacturer: APLISENS S.A.

ul. Morelowa 7 03-192 Warszawa

Poland

Additional 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/ExTR11.0004/00 CZ/FTZU/ExTR11.0004/01 CZ/FTZU/ExTR11.0004/02

Quality Assessment Report:

PL/KDB/QAR12.0001/03



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Pressure transmitters PC-29A, PC-29B, PC-29S are designed to measure positive gauge pressure, vacuum pressure and absolute pressure of gases, vapours and liquids. Hydrostatic level probes SG-25A and SG-25B are designed to measure of level of liquid. Differential pressure transmitters PR-29A, PR-29B, PR-29S are designed to measure liquid levels in closed tanks and to measure differential pressure across constructions. The active sensing element is a silicon diaphragm with in-diffused piezoresistors located in a sensing module. The electronic part amplifies and standardizes the signal from measuring bridge to the output voltage (three wires) signal. The electronic circuitry is encapsulated in stainless steel enclosure. The external circuit connection facility differs according to the model. The letters XX indicate type of process connector, YY indicate type of electric connector.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Version of the transmitter with surge arrester, marked on the plate "SA", does not meet the requirements of Section 6.3.13 of IEC 60079-11:2011 (test of isolation 500VAC). This must be taken into account during the installation of transmitters.



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Equipment (continued):

Ambient temperature:

Ta = - 40°C to XX°C - all versions

Ta = - 50°C to XX°C - special version only for Group II

XX = 80°C for T4 and Group I,

 $XX = 70^{\circ}C$ for T5,

 $XX = 45^{\circ}C$ for T6

Intrinsically safe parameters:

Types: PC-29A, PC-29PA, PC-29PS, PR-29A, PR-29S, SG-25A;

Supply terminals 1, 3:

Linear power supply output characteristic:

Ui = 16 V, Ii = 0.2 A, Pi = 0.8 W, Li = 10 μ H, Ci = 10 nF;

Trapezoidal and Rectangular power supply output characteristic:

Ui = 12 V, Ii = 0.05 A, Pi = 0.6 W, Li = 10 μ H, Ci = 10 nF;

Output terminals 2, 3:

Uo = Ui, Io = Ii, Po = Pi, Lo = 0.55 mH, Co = $0.3 \mu\text{F}$;

Types: PC-29B, PC-29PB, PR-29B, SG-25B;

Supply terminals 1, 3:

Ui = 5.6 V, Ii = 0.2 A, Pi = 0.56 W, Ci = 10 μ F, Li = 10 μ H;

Output terminals 2, 3:

Uo = Ui, Io = Ii, Po = Pi, Lo = 0.55 mH, Co = $40 \mu F$;



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 4:

- Adding new model (variant) extension of series: PC-29S, PR-29S, PC-29PS.
- Added versions of transmitter and probe with the revised main PCB PC29-rev4, version S, with minor changes in used components.
- · Minor changes in used seals.
- · Introduced other minor changes do not affect the intrinsic safety.
- · Updating existing documentation.
- · Evaluation according to the newest standards.

Technical and intrinsically safe parameters and construction of apparatus remain unchanged.