CERTIFICATE

[1] **EC-TYPE EXAMINATION CERTIFICATE**

[2] Equipment, protective systems and components intended for use in potentially explosive atmospheres - Directive 94/9/EC

[3] EC – type examination certificate:

KDB 05ATEX252X

[4] Equipment or protective system:

Pressure Transmitter type APC-2000 EExd/XX

[5] Manufacturer:

APLISENS - Production of Pressure Transmitters and Devices for Measurement Sp. z o. o.

[6] Address:

ul. Morelowa 7, 03-192 Warszawa

[7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] Central Mining Institute, Notified Body number 1453 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment and 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 number KDB No. 05.241 [T-5478]

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014:1997+A1:1999+A2:1999;
EN 50018:2000+A1:2002; EN 50284:1999

[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 and construction of the specified equipment and protective system in accordance with Directive 94/9/EC.
Further requirements of the Directive may 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 the following:

II 1/2G
EEx d IIC T5

KDB ATEX

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Product Certification Team
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Date of issuance: 22.07.2005

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ZESPOŁU CERTYFIKACJI WYROBÓW
KD „BARBARA" MIKOŁÓW
dr inż. Krzysztof Cybulski

Główny Instytut Górnictwa w Katowicach
Jednostka Certyfikująca

GŁÓWNY INSTYTUT GÓRNICTWA
KIEROWNIK
Jednostki Certyfikującej
dr inż. Dariusz Stefaniak

[13] # SCHEDULE

[14] **EC-Type Examination Certificate KDB 05ATEX252X**

[15] **Description:**

The APC-2000 EExd/XX pressure transmitters are intended for the measurement of pressure, underpressure and overpressure of gases, vapors and liquids (with corrosivity abilities also).

The pressure transmitters can be fitted with special process connections and diaphragm seals if required (e.g. for aggressive and dense medium, high and low temperature). Fitting accessories and diaphragm seals are described in manufacturer catalogue.

Construction of the device is based on application of one standardized type of protection ('d') in combination with a flameproof joint and a separation element. As the separation element was used a partition wall made from stainless steel with thickness smaller than 0,2mm. The APC-2000 EExd/XX pressure transmitters are fitted with an Aplisens flameproof enclosure type AL164 (KDB 05ATEX210U). The flameproof cable glands and closing devices types are listed in the descriptive document (APC2000-C332-01).

Technical parameters:

Measurement range	-100 kPa ÷ 40 MPa;
Output signal	4 ÷ 20 mA;
Accuracy	0,075 % ÷ 0,5 % in dependence on the measurement range;
Power supply	do 38 VDC (nominal 24 VDC);
Ambient temperature range	-40 °C ÷ +80 °C
Degree of protection provided by enclosure	IP65

[16] **Test report:**

Report no. KDB Nr 05.241
The relative pressure of 38 [bar] was applied during the overpressure test in conformity with 15.1.3.1 of EN 50018:2000+A1:2002. It is four times the reference pressure for enclosures not subject to routine overpressure testing.

[17] **Special condition for safe use:**

- As the replacing elements, can be use only those specified in the descriptive documentation;

[18] **Essential health and safety requirements:**

Met by compliance with standards listed in Section 9. of this Certificate.

Główny Instytut Górnictwa w Katowicach
Jednostka Certyfikująca

[13] # SCHEDULE

[14] **EC-Type Examination Certificate KDB 05ATEX252X**

[19] **Descriptive documents:**

Technical documentation with following drawings:	DT.APC2000 EExd/XX	08.2005
Fig. „Pressure transmitter APC-2000 EExd/XX flameproof performance"	APC2000-A301-TA sheets 1B, 2B	08.2005
Fig. „Pressure transmitter APC-2000 EExd/XX dimensions of flameproof joints"	APC2000-A301-Z	08.2005
Fig. „Pressure transmitter APC-2000 EExd/XX with diaphragm seals"	APC2000-A311-TA	08.2005
Fig. „APC-2000 EExd/XX schematic diagram of connection board MPC2-FO rev2"	APC2000-S301-10	08.2005
Fig. „Connection bard set MPC2-FO rev2"	APC2000-B312-TA sheets 1,2	08.2005
Fig. „List of interchanging cable glands and stopping plugs with flameproof marking EExd IIC"	APC2000-C332-01	08.2005
Fig. „Pressure head with bushing set Ø15 flameproof performance"	ZG-018-TA sheets 1C, 2C	04.2005
Fig. „Pressure head with bushing set flameproof performance"	ZG-024-TA sheets 1,2	04.2005
Fig. „Head - medium, high, absolute pressure, flameproof performance"	GC4-001-TA sheets 1A, 2A	04.2005
Fig. „Head - medium, high, absolute pressure, flameproof performance"	GC3-008-TA sheets 1, 2	04.2005
Fig. „Socket"	G-193-00	03.2005
Fig. „Pin"	G-194-00	11.2004
Fig. „Wire-drawing end"	G-074-00	21.04.2005
Fig. „Diaphragm Ø15"	G-181-00-EE	21.04.2005
Fig. „Head connector"	A-184-TA	11.2004
Fig. „Intermediate bard set"	ZA-038-TA	12.2004
Fig. „Connector"	G-184-00	21.04.2005
Fig. „Case"	G-206-00	03.2005
Fig. „Socket"	G-042-00	21.04.2005
Fig. „Diaphragm Ø25"	G-059-00-EE	21.04.2005