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 05ATEX116X

[4] Equipment or protective system:

Rotary Switch type ExWP x.xx-MS

[5] Manufacturer:

Zakłady Badawczo Produkcyjne „ELDIS" Sp. z o. o.

[6] Address:

ul. Narwicka 1, PL 80-557 Gdańsk

[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. 05.111 [T-5336]

[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 50019:2000; EN 50281-1-1:1998+AC:1999+A1:2002

[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 2GD
EEx ed IIC T6
IP67 T 85°C

Date of issuance: 12.04.2005

KDB ATEX

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GŁÓWNY INSTYTUT GÓRNICT
K I E R O W N I
Jednostki Certyfikującej
dr inż. Dariusz Stefanic

[13] # SCHEDULE

[14] **EC-Type Examination Certificate KDB 05ATEX116X**

[15] **Description:**

Rotary Switches types ExWP... have been designated for use in single phase lighting circuits, power circuits, control circuits and measuring circuits in the potentially explosive gas, vapour and dust atmospheres of group II, temperature classes T1÷T6.

The Rotary Switch consists flameproof rotary switch placed in brazen enclosure. The Rotary Switches were provided with cable glands (integrated part of enclosure) for 9mm, 13mm, 17mm cables.

Rotary Switches types ExWP... are manufactured in four variations as the case of number of cable glands.

Technical parameters:

Rated voltage	250 V
Rated frequency	50 Hz
Rated current	10 A
Max. diameter of conductor	2,5 mm^2
Relative humidity	98±2 %
Operational temperature	-25°C to +45°C
Degree of protection provided by enclosure	IP67

[13] # SCHEDULE

[14] **EC-Type Examination Certificate KDB 05ATEX116X**

[16] **Test report:**

Report KDB no. 05.111
The relative pressure of 14,1 [bar] was applied during the overpressure test in conformity with 15.1.3.1 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;
- Distribution Box operational temperature: -25°C to +45°C;

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

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

[19] **Descriptive documents:**

Technical Documentation „Rotary Switch type ExWP x.xx-MS"		March 2005
Fig. „Rotary Switch type ExWP x.xx-MS"	Ex WP.00	07.01.05
Fig. „Enclosure of switch"	Ex OW-WP.00	07.01.05
Fig. „Body K-OW 2.2"	Ex OW-GR.01/2	07.01.05
Fig. „Body K-OW 2.2L"	Ex OW-GR.01/2L	07.01.05
Fig. „Body K-OW 2.3"	Ex OW-GR.01/3	07.01.05
Fig. „Cover PWP-OW of rotary switch"	Ex OW-WP.01	07.01.05
Fig. „Gland M10x1"	Ex OW-WP.02	07.01.05
Fig. „Gland M27x1,5"	Ex OW-GR.03	07.01.05
Fig. „Round washer 24/13"	Ex OW-GR.04	07.01.05
Fig. „Round washer 8,6/5,3"	Ex OW-WP.03	07.01.05
Fig. „Gasket 8/4"	Ex OW-WP.04	07.01.05
Fig. „Gasket of enclosure"	Ex OW-GR.05	07.01.05
Fig. „Gasket 24/9"	Ex OW-GR.06	07.01.05
Fig. „Switch in flameproof enclosure Ex ŁK-10A"	Ex ŁK-WP.00.00	07.01.05
Fig. „Body of flameproof enclosure"	Ex ŁK-WP.00.01	07.01.05
Fig. „Cover of flameproof enclosure - complete"	Ex ŁK-WP.10.00	07.01.05
Fig. „Cover of flameproof enclosure"	Ex ŁK-WP.11.00	07.01.05
Fig. „Bushing"	Ex ŁK-WP.11.01	07.01.05
Fig. „Bush"	Ex ŁK-WP.11.02	07.01.05
Fig. „Axle"	Ex ŁK-WP.20.11	07.01.05
Fig. „Flameproof joints and clearance of switch Ex ŁK-10A"	Ex ŁK-WP.A	07.01.05
Fig. „Data plate"	Ex WP.01	07.01.05
Instruction of safety use and servicing of the flameproof distribution boxes.		March 2005

Główny Instytut Górnictwa w Katowicach
Jednostka Certyfikująca