



AC 038



KDB ATEX



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This certificate and its  
schedules may only be  
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**SUPPLEMENT No 3**  
**to EC-TYPE EXAMINATION CERTIFICATE**  
**KDB 05ATEX082**

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

[3] Equipment and protective system:

**Repeater power supply ZS-30EEx, ZS-31EEx**

[4] Manufacturer:

**APLISENS S. A. - Produkcja**  
**Przemysłowej Aparatury Pomiarowej i Elementów Automatyki**

[5] Address:


**ul. Morelowa 7, 03-192 Warszawa**

[6] Changes were introduced to design or construction of component in accordance with the specification set out in the Schedule attached to this certificate and the documents therein referred to.

This document shall be held with the original Certificate.

The examination and test results are recorded in confidential report  
KDB No. 09.194 [T-5399]

[7] Marking:


 **I (M1) [EExia]I**  
**II (1) G [EExia]IIC**

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

EN 60079-0:2006; (PN-EN 60079-0:2009);

EN 60079-11:2007; (PN-EN 60079-11:2007);

[9] The marking will change to:


 **I (M1) [Ex ia] I**  
**II (1) G [Ex ia] IIC**

SPECJALISTA ds. CERTYFIKACJI  
URZĄDZEN PRZECIWWYBUCHOWYCH

  
mgr inż. Wojciech Kwiatkowski



**KIEROWNIK**  
**Zespołu Certyfikacji Wyrobów**  
**KD „BARBARA” Mikołów**

  
doc. dr hab. inż. Krzysztof Cybulski

Date of issue: 22.01.2010

Date of English version: 2.03.2010



[10]

## SCHEDULE

[11]

**Supplement no 3 to EC-Type Examination Certificate KDB 05ATEX082**

[12] **Description of the variation to the equipment or protective system:**

Was examined compliance of equipment with standards:

- EN 60079-0:2006; (PN-EN 60079-0:2009);
- EN 60079-11:2007; (PN-EN 60079-11:2007).

Introduced changes:

- mains transformer,
- tracks on printed circuit board,
- voltage limiter BEx,
- intrinsically safe parameters of equipment.

**Technical parameters of the device have been changed to following:**

|   |  |
|---|--|
| Ambient temperature : -25 °C ÷ 55 °C or +5 °C ÷ 55 °C ; |  |
| ZS-30Ex , ZS-31Ex                                       | Terminals: P+ P- Io=100 mA, Lo = 2,2 mH; linear output characteristic. |
| version 1 (25V)   | Uo = 25,5 V, Po = 0,63 W, Co = 0,09 µF;                                |
| version 2 (22V)   | Uo = 23,1 V, Po = 0,56 W, Co = 0,13;                                   |
| version 3 (20V)   | Uo = 21,0 V, Po = 0,5W; Co = 0,175 µF;                                 |
| version 4 (18V)   | Uo = 18,4 V, Po = 0,41W, Co = 0,270 µF;                                |
| version 5 (15V)   | Uo = 15,75 V, Po = 0,4W, Co = 0,450 µF;                                |

Note: The above load parameters apply where:

1. The external circuit contains no combined lumped inductance  $L_i$  and capacitance  $C_i$  greater than 1% of the above values or
2. The inductance and capacitance are distributed as in a cable or
3. The external circuit contains either only lumped inductance or lumped capacitance in combination with a cable.

In all other situations e.g. the external circuit contains combined lumped inductance or lumped capacitance, up to 50% of each of the L and C values is allowed.

Marking of the device have been changed to ZS-30Ex1, ZS-31Ex1.

[13] **Special conditions for safe use:** not changed

