




**KDBEX.eu**

- [1] **EU TYPE EXAMINATION CERTIFICATE**
- [2] Protective equipment and systems intended for use in potentially explosive atmospheres. Directive 2014/34/EU (Rozporządzenie Ministra Rozwoju z dnia 06.06.2016r. Dz.U. z dnia 09.06.2016r. Poz. 817)
- [3] EU type examination certificate (module B):  
**KDB 04ATEX172X** **1st edition**
- [4] Equipment:  
**Universal heat detector type TUN-38Ex**
- [5] Manufacturer:  
**POLON-ALFA S.A.**
- [6] Address:  
**85-861 Bydgoszcz, ul. Glinki 155, POLAND**
- [7] The protective equipment or system and any acceptable variations thereto are specified in the schedule to this certificate.
- [8] Central Mining Institute, Notified Body no 1453 according to Directive 2014/34/EU of February 26, 2014, approves that the protective equipment or system specified in this certificate has been found to comply with the essential health and safety requirements for the design and construction of protective equipment and systems intended for use in potentially explosive atmosphere given in Annex II to Directive 2014/34 /EU (Załącznik nr 2 Rozporządzenia Ministra Rozwoju z dnia 06.06.2016r. Dz.U. z dnia 09.06.2016r. Poz. 817). The results of the assessment and examinations as well as the list of agreed documentation are recorded in the confidential Report **KDB No. 04.287-3 [T-5181]**
- [9] The essential health and safety requirements have been met by compliance with the requirements of the following standards:  
**EN 60079-0:2012 + A11:2013; EN 60079-11:2012**
- [10] If sign "X" is placed after the certificate number, this means the specific conditions of use set out in the schedule to this certificate.
- [11] This EU type examination certificate relates only to the construction, assessment and testing of the specified product in accordance with Directive 2014/34 /EU (Rozporządzenie Ministra Rozwoju z dnia 06.06.2016r. Dz.U. z dnia 09.06.2016r. Poz. 817). The certificate shall not cover the remaining requirements of the Directive regarding the manufacturing process and placing the protective equipment or system on the market.
- [12] The marking of the equipment shall include the following:

 **II 2G Ex ib IIC T5/T6 Gb**

mgr inż. *Piotr Madej*

ATEX Certification  
Expert



**GLÓWNY INSTYTUT GÓRNICZWA  
KIEROWNIK  
Jednostki Certyfikującej**  
*dr inż. Dariusz Stefaniak*

Date of issue: **01.08.2018**

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**Central Mining Institute, 40-166 Katowice, Plac Gwarków 1, Poland, www.gig.eu**  
(Certification Body-Product Certification Team-Experimental Mine "Barbara" Mikołów)  
**Certification Body accredited by PCA [Polish Centre for Accreditation], No AC038.**

[13]  
[14]

**SCHEDULE**  
EU type examination certificate  
**KDB 04ATEX172X 1st edition**



**[15] Description:**

Universal heat detector type TUN-38Ex is designed for detection of fire hazard in confined spaces in which temperature increases in the first phase of the fire. The enclosure of the detector is made of plastic and it has two chambers. The electronic circuit, encapsulated by filling compound is placed inside one of the chambers. The temperature detector (thermistor) is placed outside of the chamber. In the chamber available to the user there are terminals connecting the detection line as well as the electrical clamps determining the operating parameters (detector class). Connecting cables are brought into the chamber through the cable glands.

**Technical parameters:**

|                                     |                  |
|-------------------------------------|------------------|
| Operating voltage                   | 20V +20% -15%    |
| Max. operating current              | 100 $\mu$ A      |
| Alarm current (at 20V)              | 20mA             |
| Minimum operating temperature limit | -25°C            |
| Relative humidity                   | ≤95% at 40°C     |
| Detector class                      | A1R; A1S; BR; BS |

Parameters of intrinsically safe circuits:

Detection line (Terminals „2” and „3”):

$U_i = 28V$        $C_i = 16.5nF$   
 $I_i = 99mA$        $L_i$  - negligibly small  
 $P_i = 0.66W$ .

The line connecting the detector with the detection indicator (Terminals „1” and „2”):

$U_o = 28V$   
 $I_o = 99mA$   
 $P_o = 0.66W$   
 $C_o = 83nF - 16,5nF - C_k$   
 $C_k$  - detection line cable capacity  
 $L_o = 2.5mH - L_k$   
 $L_k$  - detection line cable inductance.

**[16] Test report:**

Sprawozdanie z oceny ATEX KDB Nr. 04.287-3.

**[17] Special conditions of use:**

Ambient temperature range:

- 25°C ... + 65°C, for temperature class T6;
- 25°C ... + 85°C, for temperature class T1 ... T5.



[13]  
[14]

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

Met by fulfilling the requirements of the following standards:

EN 60079-0:2012 + A11:2013; EN 60079-11:2012

(*PN-EN 60079-0:2013-03+A11:2014-03, PN-EN 60079-11:2012*)

**Document history:**

- EC type examination certificate KDB 04ATEX172X, 0 edition of 20.10.2004 with supplements, initial certification.
- EU type examination certificate KDB 04ATEX172X, 1st edition, supersedes the certificate KDB 04ATEX172X, 0 edition.

