



GIG



AC 038



KDB/ATEX



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This certificate and its
schedules may only be
reproduced in its entirety and
without change

Product certification program
no: PCW-ISO/IEC-1b
CODE ICS 13.230

[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 13ATEX0058X

[4] Equipment:

Multi-band flame detector type PPW-40REx

[5] Manufacturer:

Polon-Alfa

Spółka z ograniczoną odpowiedzialnością Sp. k.

[6] Address:

ul. Glinki 155, 85-861 Bydgoszcz, Poland

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

[8] Główny Instytut Górnictwa, 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
KDB No. 13.075 [T-6971]

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

EN 60079-0:2009; EN 60079-1:2007; EN 60079-31:2009

[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 shall include the following:



II 2G Ex d IIC T6 Gb



II 1D Ex ta IIIC T85°C IP66

Specjalista ds. Certyfikacji
Urządzeń Przeciwwybuchowych

dr inż. Michał Górny



GŁÓWNY INSTYTUT GÓRNICZWA
KIEROWNIK
Jednostki Certyfikującej
dr inż. Dariusz Stefaniak

Date of issue: 04.07.2013

Date of English version: 05.12.2013

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SCHEDULE

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EC-Type Examination Certificate KDB 13ATEX0058X

[15] Description:

Multi-band flame detector type PPW - 40REx is designed for flame detection using of infrared radiation. The detector can be used in zones 1 and 2 potentially explosive mixtures of gases and vapors mixed with air subgroups IIA, IIB, IIC and in zones 20 , 21, 22 explosive mixtures of combustible dust with air subgroups IIIA , IIIB, IIIC.

The detector is suitable to work with the control panels, which enable receiving an alarm signal from the relay, as well as is designed to cooperation with other systems via 4-20mA current loop output.

The detector is located in a cylinder shape flameproof enclosure. Windows with the unit of directional mirrors is located in an enclosure cover. The base of the detector provides the ability to build up cable glands (up to three pieces) for cable entry. Unused threaded holes are plugged with blanking elements dedicated to cable glands.

Band detectors and microcontroller supervising operation of the device are built inside the enclosure. The device is equipped with a heater, which protects optical components from frosting or moistening and signal relay outputs: alarm, fault and 4-20mA current loop output.

Certified cable glands used in the device:

- type 501/421/B/M25, manufacturer: HAWKE,  II 2G Exd IIC Gb,  II 2G Exe IIC Gb,  II 2D Extb IIIC Db, PTB 06ATEX0056X;
- type ADE 1F M25x1,5 (typ 5÷7), manufacturer: Cooper Crouse-Hinds;  II 2G Exd IIC/Exe II,  II 2D Ex tD, LCIE 97 ATEX 6008X
- type CS... or CG... manufacturer : Ex Solution,  II 2G Ex de IIC Gb,  II 2D Ex ta IIIC, KDB 10ATEX050X;



SCHEDULE

EC-Type Examination Certificate KDB 13ATEX0058X

Technical parameters:

Power supply	24 VDC (min. 18 VDC, max. 36VDC)
Power consumption without heater	1W, 24 VDC, 1.3W, 24 VDC (in alarming condition) 1.2W, 36 VDC 1.6W, 36 VDC (in alarming condition)
heater power	7 W
Relay Outputs Alarm relay	5 A, 30 VDC, contacts NO and NC - not supplied coil in quiescent condition.
Fault relay	5 A, 30 VDC, contacts NO - supplied coil in quiescent condition.
Ambient temperature range	-40°C ÷ +75°C
Ingress of protection IP	IP66
Weight	2.0 kg

[16] Test report:

Test report KDB Nr 13.075

[17] Special conditions for safe use:

- Some gaps of flameproof joints in the enclosure are smaller than required in Table 2 EN 60079-1. The relevant information for the user are included in the Operating Instructions.
- Ambient temperature range: -40 ° C to +75 ° C

[18] Essential health and safety requirements:

Met by compliance with standards listed below:

- EN 60079-0:2009 (PN-EN 60079-0:2009);
- EN 60079-1:2007 (PN-EN 60079-1:2010);
- EN 60079-31:2009 (PN-EN 60079-31:2010);