GIG

PCA
POLSKIE CENTRUM AKREDYTACJI
CERTYFIKACJA WYROBÓW
AC 038

INTERNATIONAL ACCREDITATION FORUM IAF

KDB ATEX

Główny Instytut Górnictwa
Jednostka Certyfikująca
Zespół Certyfikacji Wyrobów
KD „Barbara"
ul. Podleska 72
43-190 Mikołów,
tel. (+48) 32 3246550
fax. (+48) 32 3224931
www.gig.katowice.pl

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:

Ex **II 2G Ex d IIC T6 Gb**

Ex **II 1D Ex ta IIIC T85°C IP66**

Specjalista ds. Certyfikacji Urządzeń Przeciwwybuchowych
dr inż. Michał Górny

Główny Instytut Górnictwa w Katowicach
Jednostka Certyfikująca
Zespół Certyfikacji Wyrobów KD "Barbara" Mikołów

GŁÓWNY INSTYTUT GÓRNICTWA
KIEROWNIK
Jednostki Certyfikującej
dr inż. Dariusz Stefaniak

Date of issue: 04.07.2013
Date of English version: 05.12.2013

13 **SCHEDULE**

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

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SCHEDULE

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Technical parameters:

Power supply	24 VDC (min. 18 VDC, max. 36VDC)
Power consumption without heater heater power	 1W, 24 VDC, 1.3W, 24 VDC (in alarming condition) 1.2W, 36 VDC 1.6W, 36 VDC (in alarming condition) 7 W
Relay Outputs Alarm relay Fault relay	 5 A, 30 VDC, contacts NO and NC - not supplied coil in quiescent condition. 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);*

Główny Instytut Górnictwa w Katowicach Jednostka Certyfikująca Zespół Certyfikacji Wyrobów KD "Barbara"