GIG

PCA
POLSKIE CENTRUM AKREDYTACJI
CERTYFIKACJA WYROBÓW
AC 038

INTERNATIONAL ACCREDITATION FORUM IAF

KDB AT-EX

Główny Instytut Górnictwa
Jednostka Certyfikująca
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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 14ATEX0118X

[4] Equipment:

Smart temperature transmitter type LI-24ALW version Ex d

[5] Manufacturer:

APLISENS S.A.

[6] Address:

ul. Morelowa 7, 03-192 Warszawa, 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. 14.141 [T-7211]

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

EN 60079-0:2012+A11:2013; EN 60079-1:2007;
EN 60079-11:2012; EN 60079-26:2007;
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 2(1)G Ex d [ia Ga] IIC T4/T5/T6 Gb**
II 2(1)D Ex t [ia Da] IIIC T105°C Db
I M2 Ex d [ia Ma] I Mb

or

Ex **II 2G Ex d IIC T* Gb**
II 2D Ex t IIIC T* Db
I M2 Ex d I Mb

Specjalista ds. Certyfikacji Urządzeń Przeciwwybuchowych
dr inż. Michał Górny

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

KIEROWNIK
Zespołu Certyfikacji Wyrobów
KD "BARBARA" Mikołów
dr hab. inż. Krzysztof Cybulski, prof. GIG

Date of issue: 13.10.2014
Date of English version: 13.10.2014

13 **SCHEDULE**

14 **EC-Type Examination Certificate KDB 14ATEX0118X**

[15] **Description:**

Smart temperature transmitter type LI-24ALW version Ex d are designed for temperature measuring in various industrial applications related to measurements, control and regulation. The transmitter basic components are enclosure and logic unit converting signal form the measuring sensor to output signal. LI-24ALW transmitters can be provided with temperature sensors installed directly to the transmitter enclosure or temperature sensors installed with the connection cable. Enclosure of the LI-24ALW transmitter is made of high pressure die-cast aluminium alloy or stainless steel. The housing consists of a main enclosure and two screwed access covers (for the display and electrical connection terminal) Cover for the display has a window. The enclosure is provided with two openings with M20x1,5 or ½" NPT.

Marking:

LI-24ALW transmitters provided with temperature sensors installed with the connection cable:

- version with aluminium alloy enclosure:

II 2(1)G Ex d [ia Ga] IIC T4/T5/T6 Gb
II 2(1)D Ex t [ia Da] IIIC T105°C Db

- version with steel (316) enclosure:

II 2(1)G Ex d [ia Ga] IIC T4/T5/T6 Gb
II 2(1)D Ex t [ia Da] IIIC T105°C Db
I M2 Ex d [ia Ma] I Mb

LI-24ALW transmitters provided with temperature sensors installed directly:

- version with aluminium alloy enclosure:

II 2G Ex d IIC T* Gb
II 2D Ex t IIIC T* Db

- version with steel (316) enclosure:

II 2G Ex d IIC T* Gb
II 2D Ex t IIIC T* Db
I M2 Ex d I Mb

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

SCHEDULE

EC-Type Examination Certificate KDB 14ATEX0118X

Technical parameters:

Power supply:	13,5 ÷ 45V DC
Output Signal:	4 ÷ 20mA
Ambient temperature:	-40°C < Ta < +40°C/+75°C
Degree of protection:	IP66/IP67

Intrinsic safety parameters:

Transmitters provided with temperature sensors installed with the connection cable:

Uo= 6,6V; Io= 9,8mA; Po= 14,5mW; Lo= 400mH; Co= 3,5µF (dla IIC), Co= 480µF (for IIB), Co= 1000µF (for IIA i I)

[16] **Test report:**

Sprawozdanie KDB Nr 14.141

[17] **Special conditions for safe use:**

- Temperature class transmitter with temperature sensor installed directly (T* for gas) or the maximum surface temperature (T* for dust) depends mainly on the process temperature (temperature-controlled medium) and methods of installation on site. Installation details are given in manufacturer's manual.
- Some of the permitted gaps in flameproof joints are smaller and width of the flameproof joints are greater than the one specified in table 1 EN 60079-1. The relevant information for the user are included in the manual.

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

Met by compliance with standards listed below:

EN 60079-0:2012+A11:2013 *(PN-EN 60079-0:2013-03+A11:2014-03);*
EN 60079-1:2007 *(PN-EN 60079-1:2010);*
EN 60079-11:2012 *(PN-EN 60079-11:2012);*
EN 60079-26:2007 *(PN-EN 60079-26:2007);*
EN 60079-31:2009 *(PN-EN 60079-31:2011);*

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