



# EU TYPE EXAMINATION CERTIFICATE

- [1] 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)
- [2] EU type examination certificate (module B):

**KDB 14ATEX0033X**

**1st edition**

- [3] Equipment:

**Junction box type**

**KZVA-VEL-X<sub>1</sub>-X<sub>2</sub>/X<sub>3</sub>P-PE/X<sub>4</sub>P-X<sub>5</sub>×X<sub>6</sub> (X<sub>7</sub>)-X<sub>8</sub> (X<sub>9</sub>)**

- [4] Manufacturer:

**JSC „VELAN”**

- [5] Address:

**Velanovskaya street 1, Zelenokumsk  
Stavropol Region, 357911 RUSSIA**

- [6] The protective equipment or system and any acceptable variations thereto are specified in the schedule to this certificate.

- [7] 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 14.033-2 [T-7128]**

- [8] 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 60079-1:2014;**

**EN 60079-31:2014;**

- [9] If sign "X" is placed after the certificate number, this means the specific conditions of use set out in the schedule to this certificate.

- [10] 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.

- [11] The marking of the equipment shall include the following:



**II 2G Ex db IIB T6 Gb**

**II 2D Ex tb IIIC T85°C Db**

inż. Andrzej Trebaczewski

ATEX Certification  
Expert



Główny Instytut Górnictwa  
Jednostka Oceny Zgodności  
p.o. KIEROWNIKA

dr inż. Dariusz Stefaniak

Date of issue: **15.03.2019**

Page 1 of 4

Central Mining Institute, 40-166 Katowice, Plac Gwarków 1, Poland, [www.gig.eu](http://www.gig.eu)  
Conformity Assessment Body, 43-190 Mikołów, ul. Podleska 72, [www.gigcert.com](http://www.gigcert.com)  
Certification Body accredited by PCA [Polish Centre for Accreditation], No AC038.

This certificate may only be reproduced in its entirety together with schedules. The document without signatures and stamps shall be not valid.

PG-ATEX-01/ExNen ed.1, 03.2019



[15] Description:

The junction box KZVA-VEL-X<sub>1</sub>-X<sub>2</sub>/X<sub>3</sub>P-PE/X<sub>4</sub>P-X<sub>5</sub>×X<sub>6</sub>(X<sub>7</sub>)-X<sub>8</sub>(X<sub>9</sub>) is equipped with flameproof enclosure made of light alloy AlSi12. The enclosure consists of body and a cover, fixed with screws M8 or M10. Between the body and the cover - the flanged flameproof joint exists. There are used Wieland terminals type WK.../U or WKN.../U or Weidmuller type WDU240. The nominal current of the box depends on number and type of applied terminals. In the body of junction box are openings with thread M20x1,5; M25x1,5; M32x1,5; M40x1,5, M50x1,5 or M63x1,5 for montage of cable inlets. Unused openings are blanking by threaded plugs.

In the name of the box type **KZVA-VEL-X<sub>1</sub>-X<sub>2</sub>/X<sub>3</sub>P-PE/X<sub>4</sub>P-X<sub>5</sub>×X<sub>6</sub>(X<sub>7</sub>)-X<sub>8</sub>(X<sub>9</sub>)**, particular symbols mean:

- KZVA-VEL** - explosion-proof terminal box made of aluminium alloy;
- X<sub>1</sub>** - box standard size: 1, 2, 3, 4, 5.1, 5.2, 6, 7, 8, 9, 10, 11, 12, 13;
- X<sub>2</sub>** - rated current of the applied terminals;
- X<sub>3</sub>** - number of terminals;
- P** - index indicating that spring clips are applied. Not indicated for terminal screws;
- PE** - index indicating that grounding terminals are available;
- X<sub>4</sub>** - number of terminals;
- P** - index indicating that spring clips are applied. Not indicated for terminal screws;
- X<sub>5</sub>** - type of plug installed;
- X<sub>6</sub>** - number of plugs for each side;
- X<sub>7</sub>** - cable glands installation side (A, B, C, D);
- X<sub>8</sub>** - explosion-proof marking (IIB, IIIC);
- X<sub>9</sub>** - additional equipment (1):
- Power supply type PS48VDC100W-DIN
  - Media convertor type MC352-1P/1S
  - Power transformer Honeywell type CRT2 or ETR2
  - Klein Termostat KTO 011 (01142.0-00)
  - Silicone heater SSM BARTEC 27-0212-3725

Technical parameters:

Max. Nominal voltage:	1000V
Max. Number of terminals:	60
Max. Nominal current:	124A
Degree of protection:	IP66
Ambient temperature:	-60°C ÷ +60°C



[13]  
[14]

**SCHEDULE**  
EU type examination certificate  
**KDB 14ATEX0033X 1st edition**



Nominal current and number of terminals are depend on the type of used terminals:

Size of the enclosure	Max. number of terminals					
	Type of terminals / I <sub>N</sub> (A)					
	WK2.5/U 24A	WK4/U 32A	WK6/U 41A	WK10/U 57A	WKN16/U 71A	WKN35/U 124A
	WOU2.5N 24A	WOU4N 32A	WOU6 41A	WOU10 57A	WOU16 71A	WOU35 124A
1	16	13	10	8	-	-
2	22	18	13	11	5	-
3	30	26	18	14	8	-
4	40	30	20	16	12	6
5.1	45	35	25	20	14	6
5.2	45	35	25	20	14	6
6	60	50	36	25	16	8
7	55	45	35	30	18	10
8	55	45	35	30	18	10
9	60	60	40	35	25	11
10	60	50	40	35	25	11
11	60	55	45	25	20	12
12	60	60	45	20	16	12
13	60	60	50	20	16	12

**Parameters of junction box with additional equipment (X<sub>9</sub>):**

Nominal voltage: 230V AC  
Max. Number of terminals: 50  
Max. Nominal current: 41A  
Degree of protection: IP66  
Ambient temperature: -60°C ÷ +60°C

**[16] Test Report:**

"ATEX assessment report" KDB No 14.033-2

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

- The screws of mechanical class no below 8.8 have to be used for jointing elements of flameproof enclosure, according to manual instruction.
- The junction box should be equipped with flameproof cable inlets according to requirements of EN 60079-14.
- The junction box can be used for connecting intrinsically safe circuits provided the insulating distances between intrinsically safe and non-intrinsically terminals in accordance with the requirements of EN 60079-11.
- The junction box with additional equipment (X<sub>9</sub>) should be equipped with power cables and cable glands of service temperature  $t_{amb} \geq 100^{\circ}\text{C}$ .





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

Met by fulfilling the requirements of the following standards:

EN 60079-0:2012 + A11:2013; EN 60079-1:2014;  
EN 60079-31:2014;  
(PN-EN 60079-0:2013-03 + A11:2014-03, PN-EN 60079-1:2014-12,  
PN-EN 60079-31:2014-10)

**Document history:**

- EC type examination certificate KDB 14ATEX0033X, 0 edition of 28.03.2014 with supplements, initial certification.
- EU type examination certificate KDB 14ATEX0017X, 1st edition of 15.03.2019, supersedes the certificate KDB 14ATEX0033X, 0 edition of 28.03.2014.  
The parameters and equipment of junction box have been changed.

