



"MINPROEKT" EAD

CERTIFICATE



- Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Directive [2] 2014/34/U (ATEX)
- Module B EU-type-examination Certificate Number: №: MP 16 ATEX 0192 X
- Product (Equipment or protective system): "Explosion proof obstruction lights, beacon type [4] lights, aircraft warning lights,, series VSU.x..."
- Applicant: JSC "VELAN"
- Address: 1 Velanovskaya str., Zelenokumsk, Stavropol Region, 357911 Russia Manufacturer: JSC "VELAN"
- Address: 1 Velanovskaya str., Zelenokumsk, Stavropol Region, 357911 Russia
- This product (equipment or protective system) and any acceptable variation thereto are specified in details [7] in the schedule to this certificate as well as the documents therein referred to.
- Minproekt EAD, notified body No.1877 in accordance with Article 17 of the Council Directive 2014/34/EU [8] (ATEX) of 26th February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment or protective system, intended for use in potentially explosive atmospheres, specified in Annex II of the Directive. The examination and test results are recorded in:

Confidential Test report No. 21/30.09.2016

- Compliance with the Essential Health and Safety Requirements has been assured by compliance with: [9] EN 60079-0:2012; EN 60079-1:2014; EN 60079-11:2012; EN 60079-31:2014.
- If the sign "X" is placed after the certificate number, it indicates that this equipment or protective system [10] is subject to special conditions for save use, specified in the schedule to this certificate. [11]
- This EU-type-examination Certificate on Module B relates only to the design and the construction of this specified equipment or protective system in accordance with Directive 2014/34/EU. This certificate does not cover the requirements of the Directive on the forthcoming procedures relating to the production process and the delivery of the product.
- [12] The marking of the equipment or protective system shall include the following:

II 2 G Ex db IIC T6 Gb

II 2 G Ex db [lb] IIC T6 Gb



II 2 D Ex tb IIIC T85°C Db IP65

II 2 D Ex tb [ib] IIIC T85°C Db IP65

-40°C≤T_a≤+60°C

This certificate does not authorize the manufacturer or his authorized representative to affix the CE mark followed by the identification number of the Notified Body as well as the marketing and/or use. This Supplement to Certificate MP 16 ATEX 0192 X extends its validity until 29.07.2024 if there is no change in the conditions under which it has been issued.

Sofia, 29.07.2019

Executive Director: /dipl. eng St. Bosnev/

"Minproekt" EAD, Sofia 1756, Bulgaria, 14 "Kliment Ohridski" avenue tel.:02/975-82 Page 1/3

Division "Scientific and Research Activity"





[13] Schedule

[14] Supplement No 1 to Module B: EU-type-examination certificate №: MP 16 ATEX 0192 X (Translation)

[15] Characteristics of the type, subject to the examination

1. Technical description

"Explosion proof obstruction lights, beacon, type lights, aircraft warning lights, series VSU.x ..." consist of two parts: aluminum housing made of aluminum alloy AK-12 and a glass light-transmitting element made of silicate glass. Inside the casing there are terminals, control unit and LED light source. The alarms, type VSU-Z, have the similar construction like VSU. The difference is the presence of piezo signal device. Certified cable entries are used.

2. Technical data of the product.

2.1. Type designation

"Explosion proof obstruction lights, beacon, type lights, aircraft warning lights, series VSU.x ...

2 (paired, if it is single - it is not marked with a sign)

Light color: R-red; Y-yellow, G-green, B-blue

In the presence of acoustic piezo signal device there must be the sign - Z

Rated voltage supply, V:
12, 24, 36, 48, 110, 127, 230

Type of voltage: AC- alternating, DC-direct

Mode of light: C-(continuous) continuous,
M-(blink) blink, F-(flash) stroboscopic,
B-(barrage) barrage

2.2. Technical characteristics:

working temperature range: -40°C + +60°C;

power supply: standard: 230V±10%AC, 50Hz; special: 12,24,36,48,110,127V, DC or AC;

power W: light signals – 6; light acoustic signals – 8;

blink frequency: 2,5Hz;

- type of light source: LED;

- brightness along the axis, not less than: 15 kd;

- sound pressure level of the signal along the acoustic axis of 1 m from the membrane (at 0,8-1,15Un) not less than: 85dB;
- relative humidity of the environment: to (98±2)% at a temperature (35±2)⁰C with condensation of moisture;
- IP protection IP65.

3. Apppplication field

"Explosion proof obstruction lights, beacon, type lights, aircraft warning lights, series VSU.x ... are intended for use in potentially explosive atmospheres as light or light-acoustic means of signaling.

Sofia, 2019-07-29

Executive Director: /dipl. eng St. Bosnev/

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Schedule

Supplement No 1 to Module B: EU-type-examination certificate №: MP 16 ATEX 0192 X (Translation)

- [16] Test report № 21/30.09.2016
- [17] Special requirements for safety use "Explosion proof obstruction lights, beacon, type lights, aircraft warning lights, series VSU.x ... are intended for an operating temperature range -40°C≤Ta≤+60°C, different from the standard
- [18] Essential requirements
 - **18.1**. According to Directive 2014/34/EU (ATEX) and the user instructions, the product is not allowed for operation in Zone 0 and Zone 20.
 - 18.2. Other essential safety requirements are covered by the standards pointed in [9].
- [19] List of the technical dossier parts
 - 19.1. Operational manual
 - 19.2. List of harmonized standards (Operational manual)
 - 19.3. Constructional documentation containing:

Drawing № ПИНЮ.425138.022 СБ; specification ПИНЮ.425138.022 – 3 sheets; Drawing № ПИНЮ.301261.190 СБ; specification ПИНЮ.301261.190 СП; Drawings №№ ПИНЮ.731251.060; ПИНЮ.711254.04; ПИНЮ.756461.017; ПИНЮ.425138.022 СЭЗ.

19.4. Additional information:

Electric LED lamps "ПЕРМ М" – Passport, Operatinal manual.

19.5. Up to date operational manual (2019).

Sofia, 2019-07-29

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