



СВИДЕТЕЛЬСТВО О ТИПОВОМ ОДОБРЕНИИ
TYPE APPROVAL CERTIFICATE

Изготовитель
Manufacturer **ОАО "ВЭЛАН", ИНН 2619000120**
JSC "VELAN"

Адрес
Address **357911, Россия, Ставропольский край, г. Зеленокумск, ул. Вэлановская, 1**
1, Velanovskaya street, Zelenokumsk, Stavropol Region, 357911, Russia

Изделие*
Product*

Соединители электрические взрывозащищенные типа СВ-ВЭЛАН
Explosio-proof connectors type СВ-ВЭЛАН

Код номенклатуры
Code of nomenclature **11130200**

На основании освидетельствования и проведенных испытаний удостоверяется, что вышеупомянутое(ые) изделие(я) удовлетворяет(ют) требованиям Российского морского регистра судоходства.
This is to certify that on the basis of the survey and tests carried out the above mentioned item(s) complies(ly) with the requirements of Russian Maritime Register of Shipping.

части XI "Правил классификации и постройки морских судов, изд. 2018 г., том 3, часть IV "Правил технического наблюдения за постройкой судов и изготовлением материалов и изделий для судов", изд. 2018 г.

chapter XI of the "Rules for the classification and construction of sea-going ships", 2018 edition, volume 3, chapter IV of the "Rules for technical supervision during construction of ships and manufacture of materials and product for ships", 2018 edition.

Настоящее Свидетельство о типовом одобрении действительно до **16.10.2023**
This Type Approval Certificate is valid until

Настоящее Свидетельство о типовом одобрении теряет силу в случаях, установленных в Правилах технического наблюдения за постройкой судов и изготовлением материалов и изделий для судов.

This Type Approval Certificate becomes invalid in cases stipulated in Rules for the Technical Supervision during Construction of Ships and Manufacture of Shipboard Materials and Products.

Дата выдачи
Date of issue **16.10.2018**

№ **18.00321.185**

Российский морской регистр судоходства
Russian Maritime Register of Shipping



М.П.
L.S.
(подпись)
(signature)

И.В. ЕСИПЕНКО / I. YESIPENKO

(фамилия, инициалы)
(name)

*Дополнительную информацию смотри на обороте.
Additional information see overleaf.

Технические данные

Technical data

Материал корпуса/ Material of case:

алюминиевый сплав с покрытием/ aluminium alloy with covering

Максимальное напряжение, В/ Maximum voltage, V:

220-250; 380-415; 480-690

Максимальный ток, А/ Maximum current, A:

63, 125

Число контактов, шт/ Number of contacts, pcs:

4, 5

Диапазон диаметров вводимых кабелей, мм/ Diameter range of entering cable, mm: 15 ... 50

Вид взрывозащиты/ Explosion protection:

1ExdIICT6X, 1ExdIICT5GbX/ ExtbIIICT95°CDbX
1ExdIICT4GbX/ ExtbIIICT120°CDbX

Температура окружающей среды, °C/ Ambient temperature, °C:

-60 ... +55

Степень защиты/ Degree of protection:

IP66

Техническая документация и дата ее одобрения Российским морским регистром судоходства
Technical documentation and the date of its approval by Russian Maritime Register of Shipping

Технические условия ТУ 3424-010-73671038-2005 "Соединители электрические промышленного назначения и взрывозащищенные" одобрены письмом РС №185-381-3.10/248585 от 10.09.2018 года.

Technical specification TU 3424-010-73671038-2005 "Industrial and explosion proof electrical connectors" was approved by RS Letter №185-381-3.10/248585 of 10.09.2018.

Образец изделия испытан под техническим наблюдением Российского морского регистра судоходства.
Product's specimen has been tested under the technical supervision of Russian Maritime Register of Shipping.

Акт № 18.00320.185

от 16.10.2018

Report No.

of

Область применения и ограничения

Application and limitations

Для соединения отрезков кабельной сети во взрывоопасных зонах и пространствах в соответствии с маркировкой взрывозащиты. Изделия должны поставляться с действующим Сертификатом о соответствии взрывозащиты.

For connection of the cable net segments in hazardous area and spaces in accordance with the explosion proof marking.

The products should be delivered with actual explosion protection type Certificate of conformity.

Вид документа, выдаваемого на изделие

Type of document issued for product

Изделия должны поставляться с копией настоящего Свидетельства о типовом одобрении.

The products shall be delivered with a copy of present Type Approval Certificate.





"MINPROEKT" JSC

CERTIFICATE



- [1] **EC-TYPE-EXAMINATION CERTIFICATE**
(Translation)
- [2] Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – Directive 94/9/EC
- [3] **EC-type-examination Certificate Number: №: MP 16 ATEX 0180 X**
- [4] **Product (Equipment or protective system): "Connector SV-VELAN.X ..."**
- [5] Applicant: **JSC „VELAN”**
- [6] Address: 1 Velanovskaya str., Zelenokumsk, Stavropol Region, 357911 Russia
- [5] Manufacturer: **JSC „VELAN”**
- [6] Address: 1 Velanovskaya str., Zelenokumsk, Stavropol Region, 357911 Russia
- [7] This product (equipment or protective system) and any acceptable variation thereto are specified in details in the schedule to this certificate and the documents therein referred to.
- [8] Minproekt JSC, notified body No.1877 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, 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. 09/12.04.2016

- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2012; EN 60079-1:2007; EN 60079-31:2009.
- [10] If the sign "X" is placed after the certificate number, it indicates that this 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 the construction of this specified equipment or protective system in accordance with Directive 94/9/EC.
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 d IIC T6 Gb



II 2 D Ex tb IIIC T85°C IP66 Db

- 20°C ≤ T_a ≤ +55°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 certificate is valid till 15.04.2021

Sofia, 2016-04-15

Executive Director:
/dipl. eng H. Hubenov/



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- [13] **Schedule**
 [14] **EC-type-examination certificate №: MP 16 ATEX 0180 X (Translation)**
 [15] **Characteristics of the type, subject to the examination**

1. Technical description

"Connectors SV-VELAN.X ..." consist of a stationary plug socket and a cable plug. The housings are made of aluminum alloy AK12. The contacts are made of brass ЛС59-1. The isolators are made of polyamide ПА6-210. The connectors have electrical interlock. The electrical interlock ensures voltage supply to the contacts only after full connection between the plug and the plug socket and disconnection of the contacts only after turning off the voltage from them.

2. Technical data of the product.

2.1. Type designation:

	SV-VELAN	X ₁	X ₂	X ₃	X ₄	V1
Name of the connector	_____					
Marking of the component parts of the connector: VR-plug with plug socket, V-plug, R-plug socket	_____					
Rated current, A: 16, 25, 32	_____					
Rated voltage: 250 - at voltage of 200-250V, 415 - at voltage of 380-415V	_____					
Number of contacts: 3 (2P+PE), 4 (3P+PE); 5 (3P+N+PE)	_____					
Climatic execution and category of emplacement	_____					

2.2. Technical data:

- operating temperature range: -20⁰C + +55⁰C;
- relative humidity of the environment: to (98±2)% at a temperature (35±2)⁰C with moisture condensing;
- force to separate the plug from the plug socket using a spanner with an arm of 285mm, no more than 50N (5 kg);
- mechanical wear-resistant of the connector (connection - disconnection): 6300 cycles;
- operation life of the connector: 5 years (after this deadline connectors are not subject to overhaul);
- IP code – IP66;
- electrical insulation resistance under normal climatic conditions not less than 10MΩ;

3. Application field

Connectors SV-VELAN.X ... ", are designed for connection and disconnection of circuits of various electrical machines up to 415V at a frequency of 50-60Hz AC and DC in hazardous areas according to their explosive marking.

Sofia, 2016-04-15

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- [13] **Schedule**
- [14] **EC-type-examination certificate №: MP 16 ATEX 0180 X (Translation)**
- [16] **Test report No 09/12.04.2016**
- [17] **Special requirements for safety use – The connectors SV-VELAN.X ... " are intended for a working temperature range of $-20^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$, different from the standard.**
- [18] **Essential requirements**
- 18.1. According to Directive 94/9/EC and the manufacturer instructions, the product is not allowed for zone 0 and zone 20.
- 18.2. Other essential safety requirements are covered by the standards pointed in [9].
- [19] **List of the technical record parts**
- 19.1 **Operating Instructions**
- 19.2 **Test reports:**
Report for testing polyamide ПА6-210 КС ОСТ 6-11-498-79/2016
- 19.3 **List of the harmonized standards (in the operating instruction)**
- 19.4 **Constructional documentation containing:**
- SV-VELAN-16-3**
Drawing №ПИНЮ.342490.006 СБ; specification ПИНЮ. 342490.006 СБ – 3 sheets; Drawing №ПИНЮ.434421.029 СБ; specification ПИНЮ. 434421.029 СБ.
- SV-VELAN-16-4**
Drawing №ПИНЮ.342490.002 СБ; specification 342490.002 СБ – 3 sheets; Drawing №ПИНЮ.434421.025 СБ; specification ПИНЮ.434421.025 СБ – 2 sheets.
- SV-VELAN-16-5**
Drawing №ПИНЮ.342490.005 СБ; specification ПИНЮ.342490.005 СБ – 3 sheets; Drawing №ПИНЮ.434421.028 СБ; specification ПИНЮ.434421.028 СБ – 2 sheets.
- SV-VELAN-32-3**
Drawing №ПИНЮ.342490.007 СБ; specification ПИНЮ.342490.007 СБ – 3 sheets; Drawing №ПИНЮ.434421.030 СБ; specification ПИНЮ.434421.030 СБ – 2 sheets.
- SV-VELAN-32-4**
Drawing №ПИНЮ.342490.003 СБ; specification ПИНЮ.342490.003 СБ – 3 sheets; Drawing №ПИНЮ.434421.026 СБ; specification ПИНЮ. 434421.026 СБ – 2 sheets.
- SV-VELAN-32-5**
Drawing №ПИНЮ.342490.004 СБ; specification ПИНЮ. 342490.004 СБ – 4 sheets; Drawing №ПИНЮ.434421.027 СБ; specification ПИНЮ. 434421.027 СБ – 2 sheets; Drawings №№ ПИНЮ.713543.015; ПИНЮ.713543.016; ПИНЮ.713553.009; ПИНЮ.713564.001; ПИНЮ.731243.014; ПИНЮ.731243.015; ПИНЮ.731243.016; ПИНЮ.731243.017; ПИНЮ.731243.018; ПИНЮ.731243.019; ПИНЮ.735222.029; ПИНЮ.735222.030; ПИНЮ.753164.010; ПИНЮ.753164.011.

Sofia, 2016-04-15

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