

**CUSTOMS UNION**  
**CERTIFICATE OF CONFORMITY**  
No. TC RU C-RU.AT15. B.00894  
Series RU No. 0502081

**EAC**

**CERTIFICATION BODY** Certification body is the Limited Liability Company "RPN Sphera". Location: room 28, bld. 1, h. 6, the 1st Kozhevnicheski side str., Moscow 115114; business address: room 1, floor 13, h. 22, Andropov av., Moscow 115533, tel.: 84992717984; e-mail: info@rp-cert.ru, accreditation certificate No. POCC RU.0001.11AT15, date of registration September 18, 2014.

**APPLICANT** "Kalancha" OOO.

OGRN (Primary state registration number) 1035008372552.

Legal address and actual location: h.22/1, Zheleznodorozhnaya str., Sergiev Posad, Moscow region, Russia, 141313.

Telephone: 8 (495) 781-92-48

e-mail: [kalancha@kalancha.ru](mailto:kalancha@kalancha.ru)

**MANUFACTURER** Kalancha OOO

OGRN (Primary state registration number) 1035008372552.

Legal address and actual location: h.22/1, Zheleznodorozhnaya str., Sergiev Posad, Moscow region, Russia, 141313.

**PRODUCTS** The equipment designed for operation in the explosive environment: Powder Fire-Extinguishing Module «BiZone», models: MPP (N)-8-KD-1-BSG-U2, MPP (N)-8-KD-1-BSG-UHLZ.1 with Ex-mark "1ExdsIIBT4 X", manufactured in accordance with the specifications TU 4854-007-18215408-2003 Rev. 3 Powder Fire-Extinguishing Module «BiZone" MPP (N)-8-KD-1-BSG-U2, MPP (N)-8-KD-1-BSG-UHLZ.1». Serial production.

**CUSTOMS COMMODITY CODE** 8424 10 000 0

**CONFORMITY TO THE REQUIREMENTS** of the Customs Union Technical Regulation TP TC 012/2011 "On the safety equipment for working in hazardous environments"

**FOUNDATIONS FOR ISSUE** Inspection report No. No. T286 LAB-EXP/08-16 dd. 03.08.2016 issued by the equipment test center, which is the part of the Limited Liability Company "Pribor-Test", accreditation certificate No. RA.RU.21AT33; Production audit report No. 1171/АП dd. 17.06.2016 issued by the certification body - Limited Liability Company "RPN Sphera", accreditation certificate No. POCC RU.0001.11AT15 dd. September 18, 2014; Specifications TU 4857-007-18215408-2003 Rev. 3, data sheet (attached to the User's manual) ПС 4854-007-18215408-2003. Certification procedure 1p.

**ADDITIONAL INFORMATION** The standards, as a result of which application on a voluntary basis the observance of requirements of the technical regulations is provided, are indicated in the Annex (Paper No. 0348852). The storage conditions shall conform to GOST 15150-69. The stated shelf period is 2 years, the stated service life is 10 years. Description of the design and explosion protection means, special safety conditions as well as the other information, which identifies the products are stated in the Annex (papers No. 0348852, 0348853, 0348854).

**VALIDITY PERIOD** from 28.03.2017 to 27.03.2022 INCLUSIVE

The head (official) of  
the certification body

/signed/

Pankin Pavel Viktorovich

Expert(s) (expert-auditor)

/signed/

Toropova Evgeniia Vyacheslavovna

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LIABILITY COMPANY "SPHERA"\* EAC/**

**ANNEX**  
**TO THE CERTIFICATE OF CONFORMITY No. TC RU C-RU.AT15.B.00894**  
**Series RU No. 0348852**

**1. STANDARDS AS A RESULT OF WHICH APPLICATION ON A VOLUNTARY BASIS THE OBSERVANCE OF REQUIREMENTS OF TH TECHNICAL REGULATIONS IS PROVIDED**

- GOST 30852.0-2002 (IEC 60079-0:1998) Explosion-proof electrical apparatus. Part 0. General requirements";
- GOST 30852.1-2002 (IEC 60079-1:1998) Explosion-proof electrical equipment. Part 1. "Flameproof enclosure" type explosion protection;
- GOST 22782.3-77 Explosion-proof electrical apparatus. Special construction. Technical requirements and methods of testing.

**2. DESIGNATED USE AND SCOPE OF APPLICATION**

The equipment is intended to be used in the explosion hazardous environments: Powder Fire-Extinguishing Module «BiZone», models: MPP (N)-8-KD-1-BSG-U2, MPP (N)-8-KD-1-BSG-UHLZ.1 with Ex-mark "IExdsIIBT4 X" (hereinafter - Modules) are designed to be used for the automated volumetric fire-fighting systems for suppression of A, B, C class fire and for live electrical installations.

Scope of supply: this equipment is designed for use in the explosion hazardous areas in the premises and the explosion hazardous areas of the external installations in accordance with the assigned Ex-mark, requirements of GOST 30852.13-2002 (IEC 60079-14:1996) and industrial safety rules, which regulate use of such equipment in the explosion hazardous areas.

**3. MAIN SPECIFICATIONS**

3.1 The main parameters and characteristics of the Modules are given in the Table 1.

Table 1.

Parameter	Value
Ex-marking according to GOST 30852.0-2002 (IEC 60079-0:1998)	IExdsIIBT4 X
Rated actuating current of the electrical actuation unit, minimum, A	0.5
Rated voltage of DC, V	9-27
Pulse duration, maximum, s	0.02
Safety current of circuit control unit, A:	
- in case of control duration maximum 5 minutes	0.05
- if duration of control is not limited	0.005
Operational pressure in the powder reservoir, MPa	1.6
Duration of powder supply, maximum, sec.	15
Brand of used fire-suppressing powder	"Phoenix ABC-70"
Operation range of ambient temperature, °C:	
- climatic version Y2	- 50 to +50
- climatic version YXJI3.1	- 20 to + 50

**4. DESCRIPTION OF THE DESIGN OF THE PRODUCT AND EXPLOSION PROTECTION MEANS**

**4.1 Design description**

The Module consists of the cabinet containing: the reservoir filled with fire-suppression powder and the vessel with fire-suppression gas, which are connected with the pipe line. The reservoir with fire-suppression powder is equipped with the nozzles for spraying the gas and powder mixture, membrane assembly and protective - safety valve. The gas vessel is equipped with lock and start gear (hereinafter - LSG). The cabinet is equipped with the grounding clip.

LSG is made in the form of cylinder with the punch pin inside, which unseals the membrane on the gas vessel. When the electrical actuation unit YΠ-3M located on the body of LSG comes into action, combustion gases actuate the punch pin. The electrical actuation unit YΠ-3M is connected to the circuit, which actuates the control unit of the automated fire suppression system.

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the certification body

/signed/

Pankin Pavel Viktorovich

Expert(s) (expert-auditor)

/signed/

Toropova Evgeniia Vyacheslavovna

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 LIABILITY COMPANY "SPHERA"\* EAC/**

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 Series RU No. 0348853

**4.2 Description of the explosion protection means**

Explosion protection of the modules is provided due to such kinds of explosion protection as «explosion-proof enclosures» conforming to GOST 30852.1-2002 (IEC 60079-1:1998), "special explosion protection" conforming to GOST 22782.3-77 and the design conforming to GOST 30852.0-2002 (IEC 60079-0:1998), and notably due to:

- limitation of maximum temperature of the enclosure outer surface till the values, which shall not exceed temperature class T4 in accordance with GOST 30852.0-2002 (IEC 60079-0:1998) with due regard for the ambient temperature;
- provision of frictional spark safety due to enclosures made from low-weight alloys with magnesium content maximum 7.5% in accordance with GOST 30852.0-2002 (IEC 60079-0:1998);
- use of the fastening parts conforming to GOST 30852.0-2002 (IEC 60079-0:1998) and GOST 30852.1-2002 (IEC 60079-1:1998);
- encasing of the electrical components to the ex-proof enclosure with highly reliable mechanical properties in accordance with GOST 30852.0-2002 (IEC 60079-0:1998), which withstands the inside pressure after the explosion and prevents release into the explosive environment according to GOST 30852.1-2002 (IEC 60079-7:1998);
- manufacturer's control of reliability of the enclosure in accordance with GOST 30852.1-2002 (IEC 60079-1:1998) by hydraulic tests to check the explosion stability;
- use of the explosion-proof connections with parameters conforming to GOST 30852.1-2002 (IEC 60079-1:1998);
- availability of the outer grounding clip conforming to GOST 30852.0-2002 (IEC 60079-0:1998);
- hermetical sealing of LSG and powder reservoirs and membranes. The threaded joints are sealed with fixative EuroLoc 270 (manufactured by Eurotrade Global Ltd.), that prevents explosive environment inside in the moment of actuation;
- when the electrical actuation unit comes into action, the surface of LSG cannot be heated above +135 °C. When the punch pin unseals the membrane located on CO<sub>2</sub> vessel, all cavities of LSG as well as void space of the reservoir with powder and pipe lines are filled with CO<sub>2</sub>, which cools combustion gases of the impulse charge of the electrical actuator and surfaces heated after contact with explosive atmosphere as well it displaces explosive environment from the pipe lines due to rise of pressure to the level exceeding atmospheric pressure (1.6 MPa) and dilutes the explosive environment in accordance with GOST 22782.3-77.

**5. SPECIAL CONDITIONS FOR SAFETY USE "X"**

Sign "X" of Ex-marking of the modules indicates on the special conditions for safety use, including:

- protection of modules from drops and knocks. In case of accidental fall from height minimum 1.5 m regardless of knocked side, the module shall be removed from the explosive hazardous area;
- in course of maintenance, wipe it with wet and clean cloth;
- NEVER recharge modules, while they stay in the explosive hazardous areas;
- provide safety grounding of modules during operation;
- the electrical actuation unit, which is the component of the module, shall be connected only via explosion-proof switching unit, which conformity to the requirements of the Technical Regulation of the Customs Union "On the safety equipment for working in hazardous environments" (TR CU 012/2011) shall be proved with valid Certificate of conformity and which shall be connected to circuit actuating the control unit of the automated fire suppression system.

The head (official) of  
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/signed/

Pankin Pavel Viktorovich

Expert(s) (expert-auditor)

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## ANNEX

TO THE CERTIFICATE OF CONFORMITY No. TC RU C-RU.AT15.B.00894

Series RU No. 0348854

**6. MARKING**

Marking of the equipment shall include:

- name of the manufacturer;
- mark of type of the equipment;
- manufacturer's code in accordance with the manufacturer's coding system;
- year of manufacture;
- Ex-marking;
- name of the certification body and number of the certificate of conformity;
- special sign of explosion protection "Ex" in accordance with Annex 2 of the Technical Regulation of the Customs union 012/2011 " On the safety equipment for working in hazardous environments";
- Customs Union conformity mark approved with the Decision of the Committee of the Customs Union dd. 15.07.2011 No. 711 providing that the equipment will conform to all technical regulations of the Customs Union and EEU technical regulations, which cover the specified equipment;
- warnings: "POWER-OFF BEFORE OPEN";
- other data, which shall be indicated by the manufacturer, if it is required by the technical documents.

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/signed/

Toropova Evgeniia Vyacheslavovna

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Перевод выполнил переводчик Абдуллаева Дийора Камалетдиновна \_\_\_\_\_  
The translation is performed the translator Abdullaeva Diiora Kamaletdinovna /signature/

**Российская Федерация.**  
**Город Москва.**  
**Двадцатого июня две тысячи**  
**девятнадцатого года.**

Я, Дзиковская Галина Владимировна,  
нотариус города Москвы, свидетельствую  
подлинность подписи переводчика  
Абдуллаевой Диоры Камалетдиновны.

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**Russian Federation**  
**In the city of Moscow**  
**On the twentieth day of June two**  
**thousand and nineteen**

I, Dzikovskaya Galina Vladimirovna, the  
Notary Public of Moscow city, certify the  
authenticity of signature of the translator  
Abdullaeva Diiora Kamaletdinovna

The signature is made in my presence.  
The identity of the signer is set

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