Перевод с русского языка на английский язык
Translation from Russian into English

CUSTOMS UNION
CERTIFICATE OF CONFORMITY

No. TC RU C-RU.AT15.B.00829
Series RU No. 0502004

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.

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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: Gas-Powder Fire Extinguishing Module «BiZone", models: MGPP-110-CO_2 -30-RH-AVSE-U2, manufactured in accordance with the specifications TU 4854-027-13393076-2012 Rev. 1 "Gas-Powder Fire Extinguishing Module «BiZone", models: MGPP-110-CO_2 -30-RH-AVSE-U2" and Powder Fire-Extinguishing Module «BiZone", models: MPP (N)-100-KD-1-BSG-U2, manufactured in accordance with TU 4854-009-13393076-2005 Powder Fire-Extinguishing Module «BiZone".
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"

GROUNDS FOR ISSUE Inspection report No. No. T284 LAB-EXP/08-16, No. T285 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.21АГ33; 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 4854-027-13393076-2012 Rev. 1, TU 4854-009-13393076-2005, operation manuals 4854-009-13393076-2005 РЭ, 4854-027-13393076-2012 РЭ, data sheets. 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. 0305576). The storage conditions shall conform to GOST 15150-69. The stated shelf period is 2 years; the stated life duration is 20 years. Description of the design and explosion protection means, special safety conditions as well as other information, which identifies the products are stated in the Annex (papers No. 035576, 0305577,)3.5578

VALIDITY PERIOD from 28.12.2016 to 27.12.2021 INCLUSIVE

The head (official) of the certification body — */ signed/* — Pozhidaeva Marina Borisovna

Expert(s) (expert-auditor) — */signed/* — Tkachenko Igor Valerievich

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CUSTOMS UNION

ANNEX
TO THE CERTIFICATE OF CONFORMITY No. TC RU C-RU.AT15.B.00829
Series RU No. 0305576

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 Explosionproof electrical apparatus. Part 0. General requirements";

- GOST 30852.1-2002 Explosionproof electrical equipment. Part 1. "Flameproof enclosure" type explosion protection;

- GOST 22782.3-77 Explosionproof electrical apparatus. Special construction. Technical requirements and methods of testing.

2. DESIGNATED USE AND SCOPE OF APPLICATION

Gas-Powder Fire Extinguishing Module «BiZone", models: MGPP-110-CO_2 -30-RH-AVSE-U2, manufactured in accordance with the specifications TU 4854-027-13393076-2012 and Powder Fire-Extinguishing Module «BiZone", models: MPP (N)-100-KD-1-BSG-U2, manufactured in accordance with TU 4854-009-13393076-2005 (hereinafter - Modules) are designed to be used for making automated fire-fighting systems for the fires of A, B, C class and live electrical installations.

Scope of supply - explosion hazardous areas in the premises and the hazardous areas of the 1st class external installations in accordance with GOST 30852.9-2002, wherein the explosive mixtures of IIC class may form in accordance with GOST 30852.19-2002 or explosive mixtures of T4 group according to GOST 30852.5-2002. As well they shall be used in accordance with Ex-marking, requirements of GOST 30852.13-2002 (IEC 60079-14:1996), other regulatory documents, 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 3.1.

Table 3.1.

Parameters and characteristics	Values of the parameters and characteristics	
	"BiZone" MGPP-110-CO_2 -30-RH-AVSE-U2	"BiZone" MPP (N)-100-KD-1-BSG-U2
Ex-marking	1ExdsIICT4 X	1ExdsIICT4 X
Weight of the Module as completed, max. in kg.	365	365
Dimensions, mm Width Length Height	 640 680 1150	 640 680 1150
Duration of gas powder fire-extinguishing agent supply, sec., max.	10	10
Action speed, sec., max.	1	1
Weight of fire-extinguishing powder, kg	80 ± 2	80 ± 2
Brand of the powder	"Phoenix ABC-70" TU 2149-005-18215408-00, Rev. 2	"Phoenix ABC-70" TU 2149-005-18215408-00, Rev. 2
Capacity of the reservoir for powder, l.	105 ± 2.5	105 ± 2.5
Total weight of gas (carbonic oxide, nitrogen), kg, min.	32	32
Rated actuation current, A	0.5	0.5
DC voltage, V	9-27	9-27

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Safe current of the circuit control, A	0.05	0.05
Range of ambient operation temperature	-50 °C + 50 °C	-50 °C + 50 °C
Indicated service life, years	20	20
Operational pressure in the reservoir with powder, MPa	1.6	1.6

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

4.1 The Fire-Extinguishing Module consists of the following assemblies: the reservoir filled with fire-suppression powder; aerator cover; frame; vessels filled with CO2; gas feeding pipe line; explosive-proof junction box KKB-07e-T TU-3464-013-43082497-09 with three inputs and Ex-marking "1ExdsIICT4 X" manufactured by "ERIDAN" CJSC (It is allowed using the junction boxes and terminal boxes from other manufacturers with similar explosion protection, level of explosion protection, same or better sub-group and temperature class, which shall meet the requirements of TR CU 012/2011, what shall be confirmed with the Certificate of conformity); explosion-proof lock and start gear; pipe line to supply the fire-extinguishing agent; membrane assembly; nozzles.

Fire-extinguishing module is actuated by two electrical actuators, which are connected to the actuation circuit of the control unit of the automated fire suppression system via the explosion-proof conjunction box. The punch pins inside of the lock and start gear are actuated by the combustion gases, after start of the electrical actuation unit УП-3М, which rupture the membranes of the vessels filled with CO2. Pressure inside of the reservoir with powder becomes rising and when it reaches 1.4 MPa, membrane of the membrane assembly breaks. Fire-extinguishing agent is supplied to the protected volume through the nozzle.

Depending on the position of the membrane assembly installed on the reservoir with powder, there are two modifications of modules MGPP-110-CO_2 -30-RH-AVSE-U2:

- If the membrane assembly is located in top position – the output of gas and powder fire-extinguishing agent MGPP-110-CO_2 -30-RH-AVSE-U2-VV is located on top of the module;
- If the membrane assembly is located in bottom position – the output of gas and powder fire-extinguishing agent MGPP-110-CO_2 -30-RH-AVSE-U2-NV is located on the bottom of the module;

The module MPP (N)-100-KD-1-BSG-U2 is equipped with membrane assembly located on the top and on the bottom – the module with up or bottom output for fire-extinguishing agent.

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" "d" in accordance with GOST 30852.1-2002 (IEC 60079-1:1998), "special explosion protection" "s" in accordance with GOST 22782.3-77 and the design conforming to GOST 30852.0-2002 (IEC 60079-0:1998) as well due to use of the explosion-proof junction box with cable glands, which shall be duly certified as compliant with the requirements of TR CU 012/2011 "On the safety equipment for working in hazardous environments". Certificate of conformity No. TC RU C-RU.ГБ06.B.00501.

Explosion protection - "explosion-proof enclosures" "d" is provided due to:

- Design and materials of the start and lock gear, its highly reliable mechanical properties, parameters of the explosion-proof connections, entry of cables into the enclosure conforms to the requirements of GOST 30852.1-2002 (IEC 60079-1:1998).

The head (official) of the certification body /signed/ Pozhidaeva Marina Borisovna

Expert(s) (expert-auditor) /signed/ Tkachenko Igor Valerievich

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ANNEX
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Explosion protection - special explosion protection" "s" is provided due to:
-inside volume of the lock and start gear as well as volume of the reservoir for powder are hermetically sealed with membranes, the threaded joints are sealed with fixative EuroLoc 270 (manufactured by Eurotrade Global Ltd.), that prevents explosive environment inside at the moment of actuation.
- when the electrical actuation unit comes into action, the surface of the lock and start gear (LSG) does not become warmer then +135 °C. When the punch pin unseals the membrane located on CO2 vessel, all cavities of LSG as well as void space of the reservoir with powder and pipe lines are filled with CO2, 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.
As well explosive protection of the module is provided due to:
- conformity of the module's design to GOST 308525.0-2002 (IEC 60079-0:1998).
- absence of the components capable to be heated above +135 °C.
- absence of the components made from low-weight metals and alloys with the content of low weight metals above the permissible level.
- observance of the operation conditions, requirements to adjustment, maintenance and repair indicated in the operation manual.
- warning writings on the body: "POWER OFF BEFORE OPENING";
- observance of the special safety conditions.

5. SPECIAL CONDITIONS FOR SAFETY USE "X"
Sign "X" in Ex-marking of the modules indicates on the special conditions for safety use, including:
- if the equipment is used in the explosive area, cleaning and wiping with use of dry cleaning materials is prohibited;
- NEVER recharge modules, while they stay in the explosion hazardous areas;

6. MARKING
Marking of the equipment shall include:
- trademark and name of the manufacturer;
- type of the module;
- serial number and date of manufacture;
- Ex-marking;
- operation range of ambient temperature;
- name of the certification body and number of the certificate;
- 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;
- other data, which shall be indicated by the manufacturer, if it is required by the technical documents.

The head (official) of
the certification body *signed* Pozhidaeva Marina Borisovna

Expert(s) (expert-auditor) *signed* Tkachenko Igor Valerievich

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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 Дийоры 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 s

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