IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx CCVE 18.0008X

Issue No: 0

Certificate history:
Issue No. 0 (2018-09-14)

Status: **Current**

Date of Issue: **2018-09-14**

Applicant: **"ZAVOD GORELTEX" Co. Ltd.**
195176, Saint Petersburg, Revolutsii road, 18, lit. A
Russian Federation

Equipment: **Junction boxes types SHORV..., SHORVA..., KKVA...**

Optional accessory:

Type of Protection: **flameproof enclosure "d", protection by enclosure "t"**

Marking:

Ex db IIB T6...T4 Gb
Ex db IIB+H_2 T6...T4 Gb
Ex db IIC T6...T4 Gb
Ex tb IIIC T65°C...T120°C Db
IP66/IP67

Approved for issue on behalf of the IECEx Certification Body: Alexander Zalogin

Position: Head of NANIO CCVE

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

NANIO "CCVE"
109377, Moscow, P.O.Box 22
Russian Federation

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Manufacturer: **"ZAVOD GORELTEX" Co. Ltd.**
193149, Novosaratovka township area, liter A, Vsevolozhsky district, Leningrad region
Russian Federation

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

RU/CCVE/ExTR18.0009/00

Quality Assessment Report:

RU/CCVE/QAR16.0004/00 RU/CCVE/QAR16.0004/01

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Junction boxes are referred to stationary equipment. Junction boxes are intended for wiring, connection and distribution of cables and wires of AC or DC circuit at various facilities.

Junction boxes are manufactured on the base of certified flameproof enclosures types SHORV..., SHORVA..., KKVA....

Junction boxes types SHORV... are rectangular flameproof enclosures which consist of the cover and the housing with a flanged flameproof joint, fastened with screws. The cover and the housing are made of aluminum-silicon alloy (SHORV...) with coating or stainless steel (SHORV-N...). Screws are made of stainless steel.

Junction boxes type SHORVA... are square flameproof enclosures which consist of the cover and the housing with a threaded flameproof joint. The cover and the housing are made of aluminum-silicon alloy with coating.

The covers and the housings of the enclosures of types SHORVA ... may be provided with an inspection window made of tempered glass sealed with a sealant.

Type KKVA... junction boxes are cylindrical flameproof enclosures which consist of the cover and the housing with a threaded flameproof joint. The cover and the housing are made of aluminum-silicon alloy with coating.

The walls of the housing and the cover may have threaded entries for the input of cables into the junction box.

Ground bolts installed on the housing of the junction boxes, additional ground terminals and/or bus bars can be used as ground components.

Structure of designation of the junction boxes, technical characteristics, dimension types, the entries, their position on the equipment, the permitted number and thread form of threaded entries are specified in LGSA.1.008.2018 and LGSA.1.007.2018.

Dimension types of junction boxes depends on the dimension types of the applied enclosures.

See annex for further description.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1) it is prohibited to use type SHORV-N... junction boxes with Ex db IIC T6...T4 Gb explosion-proof marking in explosive mixture of acetylene with air;

2) the cable glands and other devices which can be mounted on the junction boxes shall be subject to separate certification as Ex-equipment and shall not invalidate the type of protection and degree of protection IP and correspond to the connecting thread, size and type of the inserted cable. To guarantee the degree of protection IP66 or IP67 the installation of the threaded coupling accessories shall be performed in accordance with the installation instructions of these accessories;

3) the conditions of the installation and use of the junction boxes specified in the Operation, safety and maintenance manual of the manufacturer shall be strictly respected.

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Additional information:

Annex:

18.0008X_Annex.pdf

NANIO CCVE
Zavod ECOMASH, VUGI Settlement
Lyubertsy, Moscow region
140004
Russian Federation

Annex to IECEx CCVE 18.0008X **Issue No. 0**

Structure of designation of junction boxes types SHORV…, SHORV-N….

X1X2(X3X4-X3X4-…)-X5X6(X7) -X5X6(X7)-…/X8, where

X1 – product name;

X2 – code of size of product's enclosure (in accordance with the Manual LGSA.1.007.2018);

X3 – number of terminal clamps (if any);

X4 – type of terminal clamp (if any);

X5 – number of cable glands (if any);

X6 – type of cable gland (if any);

X7 – side of cable gland location (if any, in accordance with the Manual LGSA.1.007.2018);

X8 – options, accessories and versions (in accordance with the Manual LGSA.1.007.2018);

The junction boxes can have additional designation "QFM…" or "UVG…" in accordance with "ZAVOD GORELTEX" Co. Ltd. classifier.

Technical data

Description of parameters	Value
Maximum rated voltage	1000 VAC 250 VDC
Maximum rated current	415 A
Maximum ambient temperature range:	-60 °C up to +60 °C*
Ingress protection degree in accordance with IEC 60529	IP66/IP67

* Minimum minus and maximum plus values of ambient temperature range for all junction boxes are set by the manufacturer with consideration of the service temperature of applied components.

Structure of designation of junction boxes type SHORVA….

X1X2-X3(X4X5-X4X5…)-X6X7(X8) -X6X7(X8)…/X9, where

X1 – product name;

X2 – code of size of product's enclosure (in accordance with the Manual LGSA.1.008.2018);

X3 – code of window size (for products with window, if any);

X4 – number of terminal clamps (if any);

X5 – type of terminal clamp (if any);

X6 – number of cable glands (if any);

X7 – type of cable gland (if any);

X8 – side of cable gland location (if any, in accordance with the Manual LGSA.1.008.2018);

X9 – options, accessories and versions (if any, in accordance with the Manual LGSA.1.008.2018);

The junction boxes can have additional designation "QFM…" or "UVG…" in accordance with "ZAVOD GORELTEX" Co. Ltd. classifier.

Technical data

Description of parameters	Value
Rated voltage, max	1000 VAC 250 VDC
Rated current, max	232 A
Maximum ambient temperature range:	-60 °C up to +85 °C*
Ingress protection degree in accordance with IEC 60529	IP66/IP67

* Minimum minus and maximum plus values of ambient temperature range for all junction boxes are set by the manufacturer with consideration of the service temperature of applied components.

Structure of designation of junction boxes type KKVA….

X1-X2X3X4X5X6(X7X8-X7X8-…)-X9(X10)-…/X11, where

X1 – product name;

X2 – number of holes;

X3 – type of mounting;

X4 – code of dimension type of product's enclosure (in accordance with the Manual LGSA.1.008.2018);

X5 – code of thread type;

X6 – thread size;

X7 – number of terminal clamps (if any);

X8 – type of terminal clamp (if any);

X9 – type of cable gland (if any);

X10 – side of cable gland location (if any);

X11 – options, accessories and versions (if any, in accordance with the Manual LGSA.1.008.2018);

The junction boxes can have additional designation "QFM…" or "UVG…" in accordance with "ZAVOD GORELTEX" Co. Ltd. classifier.

Technical data

Description of parameters	Value
Rated voltage, max	1000 VAC 250 VDC
Rated current, max	125 A
Maximum ambient temperature range:	-60 °C up to +85 °C*
Ingress protection degree in accordance with IEC 60529	IP66/IP67

* Minimum minus and maximum plus values of ambient temperature range for all junction boxes are set by the manufacturer with consideration of the service temperature of applied components.