1. # EU-TYPE EXAMINATION CERTIFICATE

2. **Equipment or Protective System Intended for use in Potentially explosive atmospheres Directive 2014/34/EU**

3. EU-Type Examination Certificate Number: **EESF 19 ATEX 029X Issue 1**

4. Product: **Control stations (push buttons, switches, control and indication units)**

   Certified types: **PKIV…, PPG…, KV…**

5. Manufacturer: **ZAVOD GORELTEX Co. Ltd.**

6. Address: **195176, Saint Petersburg, Revolutsii road, 18, lit. A**

   Russian Federation

7. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8. Eurofins Expert Services Oy, Notified Body number 0537, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

   The examination and test results are recorded in confidential report No. RU/CCVE/ExTR18.0010/00 and RU/CCVE/ExTR18.0010/01.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

   EN 60079-0:2012/A11:2013 **EN 60079-1:2014** **EN IEC 60079-7:2015/A1:2018**
   EN 60079-18:2015/A1:2017 **EN 60079-31:2014**

10. If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11. This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12. The marking of the product shall include the following:

II 2 G Ex db IIB T6…T4 Gb
II 2 G Ex db IIB+H_2 T6…T5 Gb
II 2 G Ex db IIC T6…T4 Gb
II 2 G Ex db eb mb IIB T6...T4 Gb
II 2 G Ex db eb mb IIB+H_2 T6...T5 Gb
II 2 G Ex db eb mb IIC T6...T4 Gb
II 2 D Ex tb IIIC T51˚C…T120˚C Db
IP54/IP66/IP67

Espoo, 14.10.2019
Eurofins Expert Services Oy

Tony Myllylä
Expert

Ilkka Riihimäki
Expert

This document is digitally signed.

13. **Schedule**

14. **EU-Type Examination Certificate EESF 19 ATEX 029X Issue 1**

15. **Description of Product**

Equipment and systems covered by this certificate are as follows:

Control stations are produced based on the certified enclosures types SHORV..., PKIV..., SHORVA..., KKVA... in which certified Ex components control and indicating elements listed in the Annex can be installed.

Control stations can be stationary or portable equipment depending on the field of application.

Control stations PKIV… series can be used as push buttons, control and indication units and are intended for control of the equipment and/or local or remote indication.

Control stations PPG… series are used as switches and are intended for switching of electric circuits, specified in the Annex.

Control stations KV... series are used as control and indication units and enclosures with control and measuring device or other visualization device installed inside.

The temperature class and the maximum surface temperature is specified by the manufacturer at the nameplate depending on the actual rated current and the actual ambient temperature range.

For additional information refer to the Annex.

16. **Report Number**

RU/CCVE/ExTR18.0010/00 and RU/CCVE/ExTR18.0010/01

17. **Specific Conditions of Use**

1. It is prohibited to use control stations type PKIV-N… with Ex markings Ⓔx II 2 G Ex db IIC T6 ... T4 Gb and Ⓔx II 2 G Ex db eb mb IIC T6...T4 Gb in explosive mixture of acetylene with air.

2. Cable glands and other devices which can be installed on control stations are subject to a separate certification as Ex-equipment and they shall not invalidate the type of protection and IP degree of protection and shall correspond to the connecting thread, its size and type of inserted cable.

18. **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are covered by the standards listed at item 9.

19. **Drawings and Documents**

Drawings and documents are listed in the confidential report RU/CCVE/ExTR18.0010/00 and RU/CCVE/ExTR18.0010/01.

20. **Certificate History**

Issue	Date	Report No.	Change
-	1.7.2019	RU/CCVE/ExTR18.0010/00	Original certificate
1	xx.x.2019	RU/CCVE/ExTR18.0010/01	One new model, new designs with windows, higher supply currents and modifications of the previously certified models to include sirens were considered.

Annex

Structure of designation of control station **PKIV**… series

X1X2X3X4 – X5 – X6X7 – X6X7 – … – X8X9 – X8X9 – … / X10, where

«X1» – product name: PKIV;

«X2» – operational environment: A – is acceptable for use in acetylene environment; no mark – is not acceptable for use in acetylene environment;

«X3» – material: no mark – aluminum alloy; «-N» – stainless steel;

«X4» – code of size of product's enclosure (in accordance with the Operation, safety and maintenance manuals LGSA.1.009.2018, LGSA.1.010.2018);

«X5» – code of window size (for products with window, if any);

«X6» – number of control element (if any);

«X7» – type of control element (if any);

«X8» – number of cable glands (if any);

«X9» – type of cable gland (if any);

«X10» - options, accessories and versions (if any, in accordance with the Operation, safety and maintenance manuals LGSA.1.009.2018 and LGSA.1.010.2018).

Technical characteristics

Control stations **PKIV**… produced on the base of the certified enclosures **SHORV**… of various materials:

Description of parameters	Value
Ex marking	Ⓔx II 2 G Ex db IIB+H_2 T6…T5 Gb Ⓔx II 2 G Ex db IIB T6…T5 Gb Ⓔx II 2 G Ex db IIC T6…T5 Gb Ⓔx II 2 G Ex db eb mb IIB+H_2 T6…T5 Gb Ⓔx II 2 G Ex db eb mb IIB T6…T5 Gb Ⓔx II 2 G Ex db eb mb IIC T6…T5 Gb Ⓔx II 2 D Ex tb IIIC T51˚C…T100 ˚C Db
Maximum voltage	1000 VAC 400 VDC
Maximum current	300 A
Maximum ambient temperature range	- 60 °C up to + 60 °C
Ex-components	RG…, PG…, KG…, LG…, PSG…
Ingress protection degree in accordance with EN 60529	IP54/IP66/IP67

Control stations **PKIVA**… produced on the base of the certified enclosures **SHORVA**… of various materials without a window:

Description of parameters	Value
Ex marking	Ⓔx II 2 G Ex db IIC T6…T4 Gb Ⓔx II 2 G Ex db IIB T6…T4 Gb Ⓔx II 2 G Ex db eb mb IIB T6…T4 Gb Ⓔx II 2 G Ex db eb mb IIC T6…T4 Gb Ⓔx II 2 D Ex tb IIIC T51˚C…T120 ˚C Db
Maximum voltage	1000 VAC 400 VDC
Maximum current	232 A
Maximum ambient temperature range	- 60 °C up to + 85 °C
Ex-components	RG…, PG…, KG…, LG…, PSG…
Ingress protection degree in accordance with EN 60529	IP54/IP66/IP67

Control stations **PKIVA**… produced on the base of the certified enclosures **SHORVA**… of various materials with a window:

Description of parameters	Value
Ex marking	Ⓔx II 2 G Ex db IIC T6…T5 Gb Ⓔx II 2 G Ex db IIB T6…T5 Gb Ⓔx II 2 G Ex db eb mb IIB T6…T5 Gb Ⓔx II 2 G Ex db eb mb IIC T6…T5 Gb Ⓔx II 2 D Ex tb IIIC T51˚C…T100 ˚C Db
Maximum voltage	1000 VAC 400 VDC
Maximum current	232 A
Maximum ambient temperature range	- 60 °C up to + 65 °C
Ex-components	RG…, PG…, KG…, LG…, PSG…
Ingress protection degree in accordance with EN 60529	IP54/IP66/IP67

Control stations **PKIVA**… produced on the base of the certified enclosures **KKVA**… of various materials:

Description of parameters	Value
Ex marking	Ⓔx II 2 G Ex db IIC T6…T4 Gb Ⓔx II 2 G Ex db IIB T6…T4 Gb Ⓔx II 2 G Ex db eb mb IIB T6…T4 Gb Ⓔx II 2 G Ex db eb mb IIC T6…T4 Gb Ⓔx II 2 D Ex tb IIIC T51˚C…T120 ˚C Db
Maximum voltage	1000 VAC 400 VDC
Maximum current	125 A
Maximum ambient temperature range	- 60 °C up to + 85 °C
Ex-components	RG…, PG…, KG…, LG…, PSG…
Ingress protection degree in accordance with EN 60529	IP54/IP66/IP67

Control stations **PKIVA**… produced on the base of the certified enclosures **PKIV**…

Description of parameters	Value
Ex marking	Ⓔx II 2 G Ex db IIC T6…T5 Gb Ⓔx II 2 G Ex db IIB T6…T5 Gb Ⓔx II 2 G Ex db eb mb IIB T6…T5 Gb Ⓔx II 2 G Ex db eb mb IIC T6…T5 Gb Ⓔx II 2 D Ex tb IIIC T51˚C…T100˚C Db
Maximum voltage	400 VAC 400 VDC
Maximum current	16 A
Maximum ambient temperature range	- 60 °C up to + 60 °C
Ex-components	RG…, PG…, KG…, LG…, PSG…
Ingress protection degree in accordance with EN 60529	IP54/IP66/IP67

Indicated values of technical characteristics are maximum values. It is permitted to use a heater installed inside the enclosure in the configuration of the control station. Actual values of technical characteristics will depend on the installed equipment and on the operating temperature of the equipment. Actual characteristics are specified by the manufacturer on the nameplate of the product. Actual characteristics cannot exceed values specified in the table above.

Structure of designation of control station **PPG**... series

X1 – X2X3 – X4X5 /X6, where

«X1» – product name: PPG;

«X2» – type of diagram (in accordance with the Operation, safety and maintenance manual LGSA.1.009.2018);

«X3» – current;

«X4» – number of cable glands (no more than two, if any);

«X5» – type of cable gland (if any);

«X6» – options, accessories and versions (if any, in accordance with the Operation, safety and maintenance manual LGSA.1.009.2018);

Technical characteristics

Description of parameters	Value
Ex marking	Ⓔx II 2 G Ex db IIC T6…T5 Gb Ⓔx II 2 G Ex db IIB T6…T5 Gb Ⓔx II 2 D Ex tb IIIC T56˚C…T90˚C Db
Maximum voltage	400 VAC 400 VDC
Maximum current	80 A
Maximum ambient temperature range	- 60 °C up to + 60 °C
Ex-components	RG…, PG…
Ingress protection degree in accordance with EN 60529	IP66/IP67

Structure of designation of control station **KV…** series

X1 – X2X3 – X4 – X5X6 / X7, where

«X1» – product name: KV;

«X2» – shortened functional purpose;

«X3» – code of size of product's enclosure;

«X4» – code of window size (for products with window, if any);

«X5» – number of cable glands (no more than two, if any);

«X6» – type of cable gland (if any);

«X7» – options, accessories and versions (if any, in accordance with the Operation, safety and maintenance manual LGSA.1.009.2018);

Technical characteristics

Description of parameters	Value
Ex marking	Ⓔx II 2 G Ex db IIC T6…T5 Gb Ⓔx II 2 G Ex db IIB T6…T5 Gb Ⓔx II 2 D Ex tb IIIC T51˚C…T100˚C Db
Maximum voltage	800 VAC* 600 VDC
Maximum current	25 A*
Maximum ambient temperature range	- 60 °C up to + 60 °C
Ex-components	RG…, PG…, LG…
Ingress protection degree in accordance with EN 60529	IP66/IP67

* Maximum values of current and voltage during overload: 50 A and 1600 V.

All equipment can have additional designation "QFM…" or "UVG…" in accordance with "ZAVOD GORELTEX" Co. Ltd. classifier.