



1. **EU-TYPE EXAMINATION CERTIFICATE**
2. **Equipment or Protective System Intended for use in
Potentially explosive atmospheres
Directive 2014/34/EU**
3. Reference: **VTT 18 ATEX 022U**
4. Component: **Control and indicating elements**
Certified types: **RG... operating handles
PG... switches
KG...control buttons
LG...indicating lamps**
5. Manufacturer: **ZAVOD GORELTEX Co. Ltd.
Saint-Petersburg, Revolutsii road, 18, lit. A
Russian Federation**
6. These components and any acceptable variations thereto are specified in the schedule and possible annex to this Certificate and the documents therein referred to.
7. VTT Expert Services Ltd, notified body number 0537, in accordance with Article 21 of the Directive 2014/34/EU of February 2014, certifies that these components have been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective system 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/ExTR17.0007/00.
8. Compliance with the Essential Health and Safety Requirements have been assured by compliance with:
**EN 60079-0 (2012) + A11:2013
EN 60079-1 (2014)
EN 60079-31 (2014)**
9. The sign "U" after the certificate number indicates that this Certificate is a component certificate and it may be used as a base for a complete certification of electrical equipment.



10. This EU-Type examination certificate relates only to the design, examination and tests of the specified component in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.
11. The marking of the component shall include the following:



II 2 G Ex db IIC Gb
II 2 D Ex tb IIIC Db
IP 66/IP67

Espoo, 11.4.2018
VTT Expert Services Ltd

Riku Vuorinen
Product Manager

Risto Sulonen
Senior Expert



KROHNA



12. **Schedule**

13. **EU-TYPE EXAMINATION CERTIFICATE VTT 18 ATEX 022U**

14. Description of component

Control and indicating elements: RG... operating handles, PG... switches, KG...control buttons and LG...indicating lamps are components intended to be mounted by means of a connection with a threaded joint on suitably certified enclosures with the type of explosion protection flameproof enclosure “d” which may also have Ex-marking with the type of explosion protection “tb”.

15. Report No. RU/CCVE/ExTR17.0007/00.

16. The Schedule of Limitations


1. The parameters of the threaded joints between the control and indicating elements: RG... operating handles, PG... switches, KG...control buttons and LG...indicating lamps and equipment with the type of explosion protection flameproof enclosure “d” shall comply with the requirements specified in clause 5.3 of EN 60079-1:2014.
2. Installation and mounting of control and indicating elements: RG... operating handles, PG... switches, KG...control buttons and LG...indicating lamps shall be performed in accordance with the operating, safety and maintenance manual- LGSA.1.005.2017.

17. Essential Health and Safety Requirements

Met by the compliance with the standards referred in point 8 above.

Espoo, 11.4.2018
VTT Expert Services Ltd


Riku Vuorinen
Product Manager


Risto Sulonen
Senior Expert



Annex to VTT 18 ATEX 022U

Designation structure and main technical characteristics of control and indicating elements: RG... operating handles, PG... switches, KG... control buttons and LG... indicating lamps are given in the operating, safety and maintenance manual- LGSA.1.005.2017.

Ingress protection degree: IP66/IP67

Ambient temperature (T_{amb}): minus 60 °C...+100 °C

Service temperature (T_s): minus 60 °C...+130 °C

KG... control buttons are pressing or rotary actuating elements. Button with indication is a combined actuating and signaling element. In buttons a key for locking may be used. All control buttons are used with a contact block provided by manufacturer. Buttons may be used with options and accessories described in the operating, safety and maintenance manual.

LG... indicating lamps are used for indication. Color of lamp's indication is in accordance with operating, safety and maintenance manual.

PG... switches are rotary actuating elements. All switches are applied with contact blocks provided by manufacturer. In switches a key for locking may be used. The operation diagram of the switches is in accordance with the operating, safety and maintenance manual.

RG... operating handles are used for control of electrical and non-electrical equipment installed in a flameproof enclosure. Handles may be applied with options and accessories described in the operating, safety and maintenance manual.

Types of devices

Lamp type	Button type	Switch type	Handle type
LGV01...	KGV01...	PGVA...	RGV*01...
LGV03...	KGV05...	PGVAZ...	RGV*02...
	KGV06...		RGV*04...
	KGV07...		RGV*05...
	KGV09...		RGV*08...
	KGV11...		RGV*09...
	KGV12...		RGV*10...
			RGV*11...
			RGV*12...
			RGV*13...

*-designation of switch handle material: N - stainless steel; «no designation» - aluminum.