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

2. EU-Type Examination Certificate Number: **EESF 18 ATEX 068U**

3. Product: Empty flameproof enclosures

Certified types: SHORVA... and KKVA...

Manufacturer: ZAVOD GORELTEX Co. Ltd.

5. Address: 195176 Saint-Petersburg, Revolutsii road, 18, lit. A

Russian Federation

- This component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 7. 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 component 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 reports Nos. RU/CCVE/ExTR16.0007/00 and , RU/CCVE/ExTR16.0007/01

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

EN 60079-0 (2012)

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 basis for certification of an equipment or a protective system.
- 10. This EU-Type Examination Certificate relates only to the design and construction of the specified component. 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 product shall include the following:

 $\langle \varepsilon_{\rm x} \rangle$

II 2 G

Ex db IIC Gb

II 2 D E

Ex tb IIIC Db

-60 °C ≤ Ta ≤ +85 °C

IP66/IP67

Espoo, 7.11.2018

Eurofins Expert Services Oy

Tony Myllylä

Expert

Risto Sulonen Senior Expert





12. Schedule

13. EU-Type Examination Certificate EESF 18 ATEX 068U

14. Description of Product

Empty enclosures of type SHORVA... are square flameproof enclosures consisting of a cover and a housing with a threaded joint. The cover and the housing are made of aluminum-silicon alloy, the stopping screw is made of stainless steel. The enclosures of aluminum-silicon alloy are coated with powder paint.

Empty enclosures of type KKVA... are flameproof enclosures of cylindrical form consisting of a cover and a housing with a threaded flameproof joint. The cover and the housing are made of aluminum-silicon alloy, the stopping screw is made of stainless steel. The enclosures of aluminum-silicon alloy are coated with powder paint. Grounding elements are installed inside and outside the housing.

The walls of the housing of the flameproof enclosures types SHORVA..., KKVA... may have threaded holes for mounting of cable glands, controls and other. The enclosures can be installed indoors and outdoors.

The covers of the enclosures of type SHORVA... may be provided with an window made of tempered glass sealed with a sealant.

Sealing ring between the housing and the cover shall be used for provision of IPX7 for empty enclosures of types SHORVA... and KKVA.....

15. Report Number

RU/CCVE/ExTR16.0007/00 and, RU/CCVE/ExTR16.0007/01

16. Schedule of Limitations

- enclosures are not approved for separate use (without installed components inside) in explosion hazardous areas;
- inside the enclosures oil-filled circuit-breakers and contractors shall not be used;
- the content of the Ex components enclosures equipment may be placed in any arrangement, provided that an area of at least 40% of each cross-sectional area remains free. The holes in enclosures are specified on the following drawings: LGSA.121211.5.2016, LGSA.151512.5.2016, LGSA.171712.5.2016, LGSA.232316.5.2016, LGSA.272721.5.2016, LGSA.D90.1.2016, LGSA.D144.1.2018;
- separate relief areas may be aggregated provided that each area has a minimum dimension in any direction of 12.5 mm.

17. Essential Health and Safety Requirements

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

18. Drawings and Documents

Drawings and documents are listed in the confidential reports.

19. Certificate History

Certifcate/Issue	Date	Change
VTT 17 ATEX 048U	19.9.2017	Original certificate
EESF 18 ATEX 068U	7.11.2018	Additional sizes of empty enclosures and additional designs of empty enclosures with glass windows and sealing rings to provide IPX7 rating were considered. The upper value of the ambient temperature range is changed from +60 °C to +°85C; Update to manufacturing address. Change of the Notified Body's name and the certificate number.



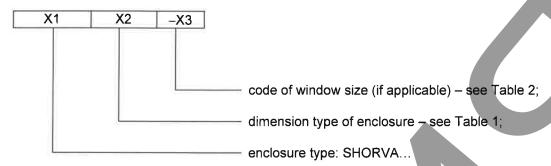




Annex

Enclosure symbol structure:

Empty enclosures type SHORVA...



Empty enclosures type KKVA....

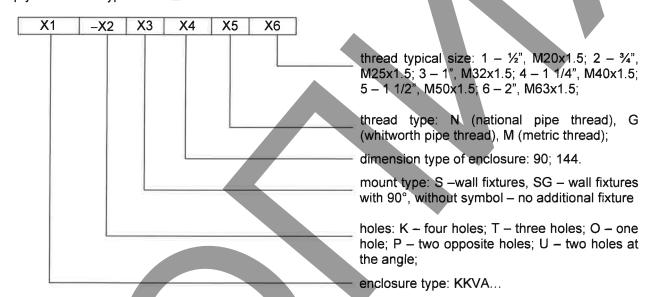


Table 1 - Dimension type of SHORVA... series enclosures

SHORVA	10.0
121211	
151512	
171712	
232316	
272721	





Table 2 - Codes of window sizes

Enclosure type:	Code of window size
SHORVA151512	O09
SHORVA171712	
SHORVA232316	O14
SHORVA272721	O18

Model identification: SHORVA121211, SHORVA151512, SHORVA171712, SHORVA232316, SHORVA272721, SHORVA151512-009, SHORVA171712-009, SHORVA232316-014, SHORVA272721-018, KKVA-...90..., KKVA-

Ambient temperature range: from minus 60 °C to +85 °C

Service temperature range of the enclosures:

- with windows: from minus 60 °C to +100 °C;
- without windows: from minus 60 °C to +150 °C





