

- 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 014X**
- 4. Product: Explosion-proof light fixtures series SG...

Certified types: SGJ01..., SGA01... and SGA02... series

- 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/ExTR18.0011/00.

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 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 IIC T6...T3 Gb and/or II 2 D Ex tb IIIC T51°C...T158°C Gb IP66

Espoo, 17.4.2019 Eurofins Expert Services Oy

Kari Koskela Expert Ilkka Riihimäki Expert

This document is digitally signed.



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13.

## Schedule

# 14. EU-Type Examination Certificate EESF 19 ATEX 014X

## 15. Description of Product

### Equipment and systems covered by this certificate are as follows:

The light fixture consists of a flameproof enclosure made of aluminum alloy with a light transmitting globe made of tempered glass. A metal grid can be installed on the light transmitting globe. The grid is not the mean of explosion protection. Inlet compartment with elements for mounting of the light fixture to the support and with threaded entries for cable glands installation is provided on the enclosure.

SGJ... series light fixtures are intended for lighting of rooms, open manufacturing sites and other facilities where lighting is required.

SGA... series light fixtures are intended for application as signal lights (obstruction lights) at the facilities where light signaling and indication is required.

Depending on the light source, the following can be included into the light fixture:

- LED unit;
- E27, E40 socket (for light source installation)

Degree of protection (EN 60529): IP66

Ambient temperature range: -60°C...+60°C

The list of considered models of SGA... and SGJ... series light fixtures is specified in the annex to this certification.

The temperature class is a function of the enclosure size, of the maximum power and ambient temperature is specified in the tables 1, 2, 3, 4, and 5 given in the annex to this Certificate and in the manufacturer's documentation.

Supply voltage for:

SGJ01... series - 10...36V DC; 110...230V AC

SGA01... series - 10...36V DC; 110...230V AC

SGA02... series - 12...230V AC/DC

Different types of light sources for DC and AC are used. The detailed description is given in the Operating, safety and maintenance manual LGSA 1.006.2018.

#### 16. Report Number

RU/CCVE/ExTR18.0011/00

#### 17. Specific Conditions of Use

- 1. The temperature under rated conditions can be higher than 70 °C at the entry point or 80 °C at the branching point of the conductors. The information to provide guidance to the user on the proper selection of cable and cable gland or conductors in conduit is marked on the equipment and given in the Operating, safety and maintenance manual LGSA.1.006.2018.
- Cable glands and plugs which can be installed are subject to a separate certification as Ex-equipment and they shall not invalidate the type of protection and degree of IP protection and shall correspond to connecting thread, its size and type of inserted cable.







3. Unused entries shall be plugged with certified plugs which do not invalidate the type of explosion protection and IP degree of protection of the light fixture.

## 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/ExTR18.0011/00.



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## Annex

	Maximum		$-60^{\circ}C \le T_{amb} \le +40^{\circ}C$		$-60^{\circ}C \le T_{amb} \le +50^{\circ}C$		$-60^{\circ}C \le T_{amb} \le +60^{\circ}C$		
Model Iuminous flux of the light source, Im		Installed power Pinst, W	Tempe- rature class	Tempera- ture for dust atmo- sphere, °C	Tempe- rature class	Tempera- ture for dust atmo- sphere, °C	Tempe- rature class	Tempera- ture for dust atmo- sphere, °C	Type of enclosure
SGJ01- 1240S	1240	9,6	Т6	52	Т6	62	Т6	72	SGJ1.1
SGJ01- 2480S	2480	18,5	Т6	58	Т6	68	Т6	78	SGJ1.1
SGJ01- 3720S	3720	28,5	Т6	66	Т6	76	T5	86	SGJ1.1
SGJ01- 4960S	4960	40,7	Т6	60	Т6	70	Т6	80	SGJ1.2
SGJ01- 6200S	6200	48	Т6	64	Т6	74	Т6	84	SGJ1.2
SGJ01- 7440S	7440	57	Т6	66	Т6	76	Τ5	86	SGJ1.2
SGJ01- 11160S	11160	85,5	Т6	75	T5	85	T5	95	SGJ1.2

Table 1. Technical characteristics of SGJ01... series light fixtures with LED unit.

Table 2. Technical characteristics of SGJ01... series light fixtures for various types of lamps with E27 and E40 sockets.

		-60°C ≤ Ta	<sub>amb</sub> ≤ +40°C	-60°C ≤ 1	<sub>amb</sub> ≤+50°C	$-60^{\circ}C \le T_{amb} \le +60^{\circ}C$		
Model	Maximum lamp power*, W	Tempe- rature class	Tempera- ture for dust atmo- sphere, °C	Tempe- rature class	Tempera- ture for dust atmo- sphere, °C	Tempe- rature class	Tempera- ture for dust atmo- sphere, °C	Type of enclosure
SGJ01-XINC	75	T6	82	T5	92	T4	102	SGJ1.1
SGJ01-XINC	150	T5	96	T4	106	T4	116	SGJ1.1
SGJ01-XINC	200	T4	129	T3	139	Т3	149	SGJ1.1
SGJ01-XINC	75	T6	73	T6	83	T5	93	SGJ1.2
SGJ01-XINC	95	T6	77	T5	87	T5	97	SGJ1.2
SGJ01-XINC	200	T5	96	T4	106	T4	116	SGJ1.2
SGJ01-XINC	300	Т3	138	Т3	148	Т3	158	SGJ1.2
SGJ01-XAI	70	T6	84	T5	94	T4	104	SGJ1.1
SGJ01-XAI	150	T4	105	T4	115	T4	125	SGJ1.1
SGJ01-XAI	205	T4	127	Т3	137	Т3	147	SGJ1.1
SGJ01-XAI	100	T6	79	T5	89	T5	99	SGJ1.2
SGJ01-XAI	205	T4	109	T4	119	T4	129	SGJ1.2
SGJ01-XEI	25	T6	70	T6	80	T5	90	SGJ1.1
SGJ01-XEI	25	T6	59	T6	69	T6	79	SGJ1.2
SGJ01-XEI	55	T6	68	T6	78	T5	88	SGJ1.2
SGJ01-XFIL	23	T6	57	T6	67	T6	77	SGJ1.2
SGJ01-XLED	15	T6	59	T6	69	T6	79	SGJ1.1
SGJ01-XLED	20	T6	67	T6	77	T5	87	SGJ1.1
SGJ01-XLED	20	T6	57	T6	67	Т6	77	SGJ1.2
SGJ01-XLED	30	T6	64	T6	74	Т6	84	SGJ1.2
SGJ01-XMix	160	T4	111	T4	121	T4	131	SGJ1.2







NOTE:

Where X is lamp's power.

Lamp types:

INC – incandescent lamp; Al – halogen lamp; El – compact fluorescent lamp; FIL – fluorescent induction lamp; LED – LED lamp; Mix – mixed light instant start lamp.

\*structure of designation of light fixtures includes actual power of lamps which does not exceed indicated maximum value depending on operating temperature and temperature class.

Table 3. Technical characteristics of SGJ01... series light fixtures for a xenon lamp.  $-60^{\circ}C \le T_{amb} \le +40^{\circ}C$  $-60^{\circ}C \le T_{amb} \le +50^{\circ}C$  $-60^{\circ}C \le T_{amb} \le +60^{\circ}C$ Maximum Temperature Temperature Temperature Type of lamp Tempe Tempe-Tempe-Model for dust for dust for dust power\*, enclosure rature rature -rature atmosphere, atmosphere, atmosphere, J class class class °С °С °C T6 T6 T6 SGJ01-XK 16 51 61 71 SGJ1.2

NOTE:

Where X is lamp's power.

Lamp types: K – Xenon lamp.

\*structure of designation of light fixtures includes actual power of lamps which does not exceed indicated maximum value depending on operating temperature and temperature class.

Table 4. Technical characteristics of SGA01... series light fixtures.

	Maximum Model lamp power*, W	$-60^{\circ}C \le T_{amb} \le +40^{\circ}C$		-60°C ≤	T <sub>amb</sub> ≤ +50°C	-60°C ≤		
Model		Tempera-	Temperature for dust atmosphere, °C	Tempera- ture class	Temperature for dust atmosphere, °C	Tempera- ture class	Temperature for dust atmosphere, °C	Type of enclosure
SGA01-	20	T6	57	T6	67	Т6	77	SGJ1.1
S	40	T6	69	T6	79	T5	89	SGJ1.2

\*structure of designation of light fixtures includes actual power of lamps which does not exceed indicated maximum value depending on operating temperature and temperature class.





## Table 5. Technical characteristics of SGA02... series light fixtures.

	$-60^{\circ}C \le T_{amb} \le +40^{\circ}C$		-60°C ≤ T	<sub>amb</sub> ≤ +50°C	-60°C ≤			
Model	Maximum lamp power*, W	Tempera- ture class	Tempera- ture for dust atmospher e, °C	Tempera- ture class	Temperature for dust atmosphere, °C	Tempera-	Temperature for dust atmosphere, °C	Type of enclosure
SGA02- SC	14	Т6	52	Т6	62	Т6	72	SGJ1.1 SGJ1.2

\*structure of designation of light fixtures includes actual power of lamps which does not exceed indicated maximum value depending on operating temperature and temperature class.

The light fixtures can have additional designation "QFM..." or "UVG..." in accordance with "ZAVOD GORELTEX" Co. Ltd. classifier.



