Technická inšpekcia, a.s.
Trnavská cesta 56, 821 01 Bratislava
Slovenská republika

[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:
TI20ATEX 50 X

[4] Product: **Fixed gas detector**

Type: DGS ERIS-210
DGS ERIS-230

[5] Manufacturer: **Limited Liability Company "ERIS"**

[6] Address: **Russian Federation, Perm Territory, Chaykovsky, Promyshlennaya street 8/25**

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

[8] Technická inšpekcia, a.s., Notified Body Number 1354 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 product 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. 50/5/2020.

[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 60079-11:2012.**
except in respect of those requirements listed at item 18 of the Schedule.

[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 this Directive apply to the manufacturing process and supply of this product.

[12] The marking of the product shall include the following:

II 2 G Ex db [ia Ga] IIC T6 Gb **-40°C ≤ Tamb ≤ +50°C**

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Bratislava, July 01st, 2020

Ing. Dušan Perniš
General Director

NB 1354

[13] **Schedule**

[14] **EU-Type Examination Certificate Number: TI20ATEX 50 X**

[15] Description of product:

The gas detector DGS ERIS-210 and DGS ERIS-230 is designed for measurement and information transfer on content of flammable gases and vapors of inflammable liquids (including petroleum vapors), toxic gases and oxygen in air of working area, process gas environment, industrial premises and open spaces of production facilities, pipelines and air ducts and for warning alarm on excess of the set alarm limit values.
The gas detector is designed for fixed installation. Depending on housing materials gas detectors are divided into the gas detector in aluminium housing or stainless steel housing.
The gas detector housing has three threaded entries. Two cable / electric conduits entries located on the both sides of the upper part of the gas detector housing are intended for connection of power supply source, signal output, and other additional accessories. The bottom entry ensures direct connection of the measurement module. The gas detector housing has the integral mounting plate providing the use of various mounting options. The gas detector cover has a glass window which allows to monitor the device status and to use the magnetic wand for activation of three magnetic switches located on the front panel of the electronic module. Power supply voltage of the gas detector: 13-36 V DC.

The gas detector consists of the following functional components:
- measurement module;
- terminal module;
- electronic module;
- housing and cover.

The measurement module is equipped with the sensor (infrared, thermocatalitic or electrochemical). The sensor function is to detect the specific gas, transform the gas concentration into the digital signal and transmit the signal to the electronic module. The measurement module is equipped with the moisture protection cap for protection against moisture.
The terminal module is designed for digital signal transmission from the measurement module to the electronic module for connection of the external power-supply circuits, analog and digital outputs, arrangement and connection of relay outputs.
The electronic module is equipped with the intrinsic safety barrier to ensure intrinsically safe circuits. To intrinsically safe circuits belong series of circuits between measurement and electronic modules. Therefore such circuits do not restrict the external connections and do not require the use of external intrinsic safety barriers to ensure explosion protection of the gas detector. Main functions of this module: generation of analog and digital signals and signals transmission to the terminal module, operation status indication of the gas detector. This module is equipped with magnetic switches for the gas detector calibration.

Overall dimensions of the gas detector are presented at Figures 2 and 3. All dimensions are indicated in mm.

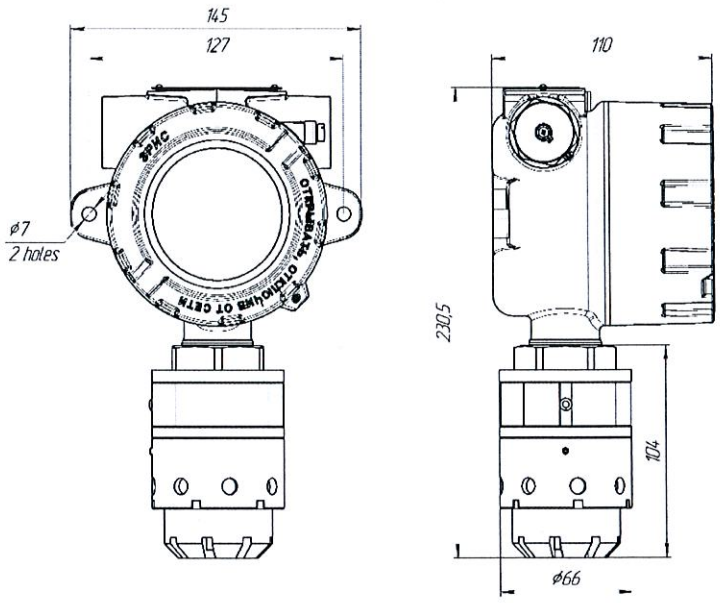

Figure 2 – Overall dimensions of DGS ERIS-210 and DGS ERIS-230

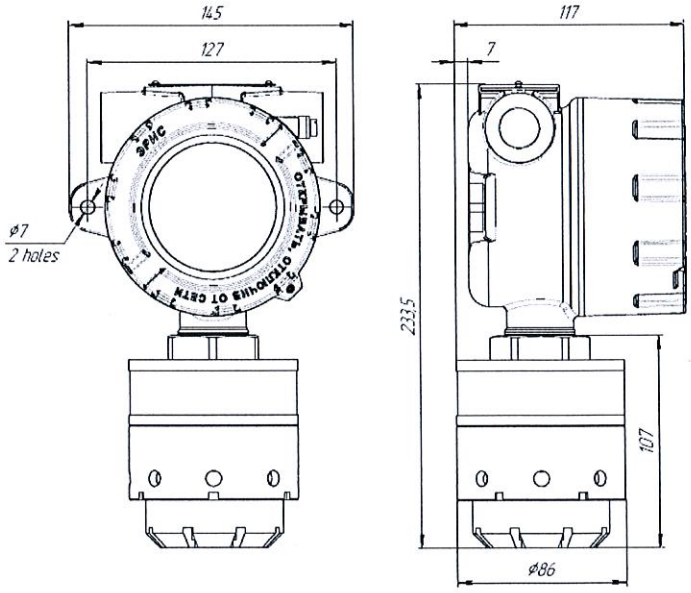

Figure 3 – Overall dimensions of DGS ERIS-210 FR and DGS ERIS-230 FR

DGS ERIS-210 is equipped with visual alarm circle, status LED in the center of the front panel.
The sensor used in the gas detector:

- DGS ERIS-210 IR – infrared sensor;
- DGS ERIS-210 CT – thermocatalytic sensor;
- DGS ERIS-210 EC – electrochemical sensor.
- DGS ERIS-210 FR – Infrared sensor

DGS ERIS-230 is equipped with status LED on the bottom of the front panel and display.
The sensor used in the gas detector:

- DGS ERIS-230 IR – infrared sensor;
- DGS ERIS-230 CT – thermocatalytic sensor;
- DGS ERIS-230 EC – electrochemical sensor.
- DGS ERIS-230 FR – Infrared sensor

[16] Report Number:
Inspection report No: 50/5/2020
Final Test Report No: 50/5/2020

[17] Specific Conditions of Use:
- Ambient temperature: -40°C ≤ Tamb ≤ +50°C
- Relative humidity: no more than 98 %
- Atmospheric pressure: from 84 up to 106.7 kPa
- Warning marking:
  "WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT"
  "WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTION"
- Electrostatic risk - do not rub and do not clean with solvent.
- All additional accessories include cable gland and stop plug can be used ATEX certified only with minimum requirement Ex db IIC T6 Gb.

[18] Essential Health and Safety Requirements:
The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.
Additional information: None.

[19] Drawings and Documents:

Number	Sheet	Issue	Date	Description
APNS.413216.230-01	3		25.03.2019	DRAWING OF DGS ERIS-230
APNS.413216.210-01	3		25.03.2019	DRAWING OF DGS ERIS-210
APNS.421519.008-05 EZ	1		29.11.2018	Drawing intrinsic safety diagram for sensors
014 ILPMK	20		03.06.2020	Test report from laboratory
DGS-210 Manual EN	73	7.3.1	15.11.2017	Instruction manual DGS ERIS 210
DGS-230 Manual EN	92		21.03.2018	Instruction manual DGS ERIS 230
14989/85.18	1		19.10.2018	Material certificate for Aluminum
36-1	1		01.01.2015	Material certificate for Aluminum
4163-18	1		31.08.2018	Material certification for stainless steel 12X18H10T
53231	1		12.10.2018	Material certification for stainless steel 12X18H10T
TU2257-003-23079412-2002	1		-	Datasheet for epoxy compound
Sira 04ATEX1357U	6		20.04.2018	Type examination certificate for MSH Gas sensor
FTZÚ 03 ATEX 0207U	3		31.08.2016	Type examination certificate model XD IL win
FTZÚ 07 ATEX 0002U	3		31.08.2016	Type examination certificate model XD-SIL win
Sira 07ATEX1088X	4		20.04.2018	Type examination certificate Flameproof Sensor Housings
ITS11ATEX27418U	8		20.04.2016	Type examination certificate for MIPEX sensor
E315805	6		-	Datasheet for hight speed protector
E230531	7		20.11.2015	Datasheet for suppression diodes
E10480	3		-	Datasheet for fuse
28713	15		06.04.2018	Datasheet for MELF Resistors

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Bratislava, July 01st , 2020

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