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 1314 X

[4] Product: **Name: Gas Analyzer**
Type: GSV-1

[5] Manufacturer: **RPE "Petroline-A" LLC**

[6] Address: 423887, Republic of Tatarstan,
Tukaevsky rayion, selo Malaya Shilna, Tsentralnaya Street, 1A

[7] This product and any acceptable variation there to 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. 1314/5/2020.

[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 indicate 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 2G Ex db ib IIC T5 Gb -40°C≤Tamb≤+50°C

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NB 1354 -5-

Bratislava, November 26th, 2020

Ing. Dušan Perniš
General Director

[13] **Schedule**

[14] **EU-Type Examination Certificate Number: TI20ATEX 1314 X**

[15] Description of product:
Name: Gas Analyzer
Type of product: GSV-1

The equipment consists of Main enclosure, Lid with Black hardened glass and Gas Sensor assembley. The equipment manufactured from casting Aluminium alloys ENAC43000. The Lid is attached to the enclosure by five fully threads. The Equipment includes rubber O-ring for weather resistance IP 67 for connecting the lid to the enclosure. Black hardened glass is glued with glue WURTH CLASSIC PLUS. The Enclosure contains two threaded inlets M20x1,5. The Gas sensor assembly is connected by bushing that is cementing with Glue by epoxy Done Deal DD6565.

Material of construction:

Main enclosure	ENAC-43000
Lid	ENAC-43000
Black hardened glass	ZM1-TP-10
Fixed block	Steel 1.4301
Rubber O ring	Nitrile butadiene rubber
Sealing washer	Nylon
Epoxy	Done deal DD6565

GSV-1 Gas analyzer is aimed at constant measuring of flammable and toxic gases air concentration in the working area of production facilities of oil industry, at open areas in the drilling zones, upstream, technological equipment of routine preprocessing, oil and gas transporting.

Basic technical data:

Marking	II 2G Ex db ib IIC T5 Gb
Temperature range in the environment of operation, °C	-40°C≤Tamb≤+50°C
GSV-1 Ingress Protection	IP67
Sensor Ingress Protection	IP54
Maximum voltage Um, V	28
Gas analyzer dimensions (H x W x D), mm	216x160x106
Intrinsically safe circuits with a gas sensor MIPEX-02-1-II-1.1A	
Max.input voltage Ui, V Max.input current Ii, mA Max.input capacity Ci, µF Max.line inductance Li, mH Max.power input, Pi, W	5,4 232 39,74 0 1,26
Output parameters of intrinsically safe circuits of signal receiver	
Max.input voltage Um, V Max.output voltage Uo, B Max.input current Ii, mA Max.input capacity Ci, µF Max.line inductance Li, mH Max.power input, Pi, W	28 5,4 232 64,9 3 1,26

[16] Report Number:
Inspection report No: 1314/5/2020
Final Test Report No: 1314/5/2020

[17] Specific Conditions of Use:

- The flameproof joints are not intended to be repaired
- Connection of external electrical circuits to gas analyzers should be carried out through EN 60079-1:2014
- Only suitably certified Ex db IIC Gb IP67 cable gland or cable plug to be used
- Gas analyzer must be installed vertically with the sensor facing down
- Warning marking "WARNING: DO NOT OPEN WHEN AN EXPLOSIVE GAS ATMOSPHERE IS PRESENT".

[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
ITS11ATEX27418U	8	5	2016	Certificate sensor MIPEX-02-1-II-1.1A
CML 18 ATEX1320X	6	0	2019	Certificate stopping plug 757DM2 M20×1.5
CML 18 ATEX1321X	6	1	2020	Certificate cable grand 20S16A2FFC1RAC030
PLA150.215.010.000-000	2	-	-	Bill of materials
PLA150.215.010.000-000 SB	1	-	-	Assembly drawing
PLA150.215.010.000-000 EX	1	-	-	Ex-drawing gas analyser
PLA150.215.010.000RE	30	20.2	2020	Operation manual
PLA150.215.010.001	1	-	-	Detail drawings
PLA150.215.010.002	1	-	-	Detail drawings
PLA150.215.010.013	1	-	-	Detail drawings
PLA150.215.010.014	1	-	-	Detail drawings
PLA150.215.010.015	1	-	-	Detail drawings
PLA150.215.010.018	1	-	-	Detail drawings
PLA150.215.010.021	1	-	-	Detail drawings
PLA150.215.010.024	1	-	-	Detail drawings
PLA150.215.010.025	1	-	-	Detail drawings
PLA150.215.010.052	1	-	-	Drawing name plate
PLA150.215.010.300	2	-	-	Bill of materials
PLA150.215.010.300SB	1	-	-	Assembly drawing
PLA150.215.010.400	2	-	-	Bill of materials
PLA150.215.010.400SB	1	-	-	Assembly drawing
CML 18ATEX1307	6	0	2019	Certificate
009ILMPK	26	-	28.04.2020	Test Report

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Bratislava, November 26th, 2020

Ing. Dušan Perniš
General Director