

# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx CCVE 18.0001 Issue No: 0 Certificate history:  
Status: **Current** Issue No. 0 (2018-11-13)  
Date of Issue: **2018-11-13** Page 1 of 3  
Applicant: **OOO NTF BACS**  
Prospekt Kirova 10, 443022 Samara  
**Russian Federation**  
Equipment: **Process Gas Chromatograph MAG of the models KC 50.310-000, KC 50.310-000-01,  
KC 50.360-000, KC 50.360-000-01**  
*Optional accessory:*  
Type of Protection: **flameproof enclosures "d"**  
Marking: Ex db IIB+H<sub>2</sub> T4 Gb  
IP66

Approved for issue on behalf of the IECEx  
Certification Body:

Aleksey Kogan

Position:

Deputy head of CB CCVE

Signature:  
(for printed version)

Date:

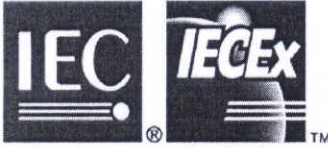
2018-11-13

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

NANIO CCVE  
Zavod ECOMASH, VUGI Settlement  
Lyubertsy, Moscow region  
140004  
Russian Federation





# IECEX Certificate of Conformity

Certificate No: IECEX CCVE 18.0001 Issue No: 0  
Date of Issue: 2018-11-13 Page 2 of 3  
Manufacturer: OOO NTF BACS  
Prospekt Kirova 10, 443022 Samara  
Russian Federation

Additional Manufacturing location(s):  
OOO NTF BACS  
Prospekt Kirova 22, 443022 Samara  
Russian Federation

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended.

#### STANDARDS:

The apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements  
Edition:6.0  
IEC 60079-1 : 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

#### TEST & ASSESSMENT REPORTS:

*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

#### Test Report:

RU/CCVE/ExTR18.0001/00

#### Quality Assessment Report:

RU/CCVE/QAR18.0001/00



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## Schedule

### EQUIPMENT:

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

The Process Gas Chromatograph MAG (hereinafter referred to as "chromatograph") has the following models:

- KC 50.310-000 - is used for continuous automatic measurement of the molar fraction of the components of natural gas in accordance with GOST 31371.7-2008 and ISO 6974 series with the subsequent calculation of the components of the values of the calorific value, relative and absolute density, the compressibility factor and the Wobbe number according to the component composition in accordance with GOST 31369-2008 and ISO 6976:2016;
- KC 50.310-000-01 - is used for continuous automatic measurement of the content of organic and inorganic substances in gas mixtures, liquefied petroleum gases and liquids;
- KC 50.360-000 - is used for continuous automatic measurement of the mass concentration of sulfur-containing components in various gas media, including natural gas with subsequent calculation of the total and mercaptan sulfur content in accordance with GOST R 53367-2009, ASTM D 7493-14 (2018) and ISO 19739:2004/Cor.1:2009;
- KC 50.360-000-01 - is used for continuous automatic measurement of the content of sulfur-containing components in various gaseous media, including natural combustible gas.

The chromatograph consists of the following units:

- control unit;
- gas supply unit;
- electronics unit;
- power supply unit;
- analytical unit.

All of the above units are enclosed in an explosion-proof enclosure with the type of protection "d".

The process gas chromatographs model KC 50.310-000-01 can include up to 4 analytical channels.

Ambient temperature range:  $-10\text{ }^{\circ}\text{C} \leq T_a \leq +50\text{ }^{\circ}\text{C}$ .

**SPECIFIC CONDITIONS OF USE: NO**

### Annex:

Annex to IECEx \_CCVE\_18 0001.pdf

NANIO CCVE  
 Zavod ECOMASH, VUGI Settlement  
 Lyubertsy, Moscow region  
 140004  
 Russian Federation



Annex to IECEx CCVE 18.0001

Issue No. 0

Electrical parameters

Ratings	Models			
	KC 50.310-000	KC 50.310-000-01	KC 50.360-000	KC 50.360-000-01
Voltage and frequency	220 <sup>+22</sup> <sub>-33</sub> V and with frequency (50±1) Hz			
Power consumption: at the warm-up	300 W	Depending on the equipment, but not more than 900 W	300 W	300 W
after the warm-up	80 W		80 W	80 W
Pressure and flow rate of carrier gas	Pressure 0.5 - 0.6 MPa; flow rate: 8 - 12 cm <sup>3</sup> /min	Pressure 0.5 - 0.6 MPa; flow rate: 5 - 30 cm <sup>3</sup> /min		
Phase of analyzed mixture	Gaseous	Gaseous, liquefied gas and liquid	Gaseous	Gaseous
Pressure and flow rate of a sample	Gas: pressure: 0.04 - 0.1 MPa; flow rate: 50 - 150 cm <sup>3</sup> /min; Liquid / liquefied gas: pressure: not more than 7 MPa.			