

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:

IECEX BVS 13.0035X

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Certificate history:

Status:

Current

Issue No: 2

Issue 1 (2016-11-04) Issue 0 (2013-03-01)

Date of Issue:

2021-08-17

Applicant:

KOBOLD Messring GmbH

Nordring 22-24 65719 Hofheim/Ts.

Germany

Equipment:

Flow measuring system type DOG-42******* and DOG-62********

Optional accessory:

Type of Protection:

Intrinsic Safety "i"

Marking:

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature: (for printed version)

Date:

Ralf Leiendecker

Deputy Head of Certification Body

17.08.2021

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This certificate is not transferable and remains the property of the issuing body.

The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

DEKRA Testing and Certification GmbH Certification Body Dinnendahlstrasse 9 44809 Bochum Germany





Certificate No.:

IECEX BVS 13.0035X

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Date of issue:

2021-08-17

Issue No: 2

Manufacturer:

KOBOLD Messring GmbH

Nordring 22-24 65719 Hofheim/Ts. **Germany**

Additional manufacturing locations:

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 equipment 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 60079-0:2017

Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

IEC 60079-11:2011 Edition:6.0

This Certificate **does not** indicate compliance with 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:

DE/BVS/ExTR13.0034/02

Quality Assessment Report:

DE/BVS/QAR09.0001/11



Certificate No.:

IECEX BVS 13.0035X

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Date of issue:

2021-08-17

Issue No: 2

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

General product information:

The flow measuring system is intended for flow measuring of gaseous media. The flow measuring system consists of a type transmitter DOG-42******* with a type sensor DOG-42******** or of a type transmitter DOG-62******* with a type sensor DOG-62*******.

The transmitter have to be mounted outside the hazardous area; both apparatus can be connected via an up to 100 m long cable.

Type Code

| | | - | t | T- | | - | | - | | |
|-----|-----|-----|----|----|----|---|---|---|---|--|
| DOG |]-[| a 2 | ** | * | ** | * | b | * | * | |

All characters "*" are not relevant for explosion protection.

- State of aggregation of the medium
 - = for gases
 - = for damp gases
- Electronics
 - = Frequency output, 230 VAC

 - D = Frequency output, 110 VAC F = Frequency output, 24 VAC R = Frequency output, 24 VDC
 - = Totaliser, pulse output, analogue output, 230 VAC
 - = Totaliser, pulse output, analogue output, 110 VAC = Totaliser, pulse output, analogue output, 24 VDC

 - = Flow computer, pulse output, analogue output, 230 VAC
 - = Flow computer, pulse output, analogue output, 110 VAC

Parameters

See Annex

SPECIFIC CONDITIONS OF USE: YES as shown below:

The sensor has to be mounted in areas where ignition hazard due to impact or friction will be excluded.

The sensor has to be mounted in areas where electrostatic charging / discharging hazard will be excluded.

The connecting cable has to be in a fixed installation if the ambient temperature is below -5 °C.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Additional variant type DOG-62******** is due to a special sensor especially for use with humid gases. The transmitter remains unchanged to type DOG-42******* in housing and electronics design.
- The type code is extended
- Update of documentation.
- Testing is no longer carried out according to the IEC 60079-26 standard.

Annex:

BVS_13_0035X_Kobold_Annex_issue_2.pdf





Certificate No.:

IECEX BVS 13.0035X issue No: 2

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<u>Parameters</u>

| 1 | Type transmitter DOG-42******** and DOG-62**** | **** | | | | | | | | |
|-----|---|---|------------|---------------------|-------|--|--|--|--|--|
| 1.1 | Mains circuit (terminals X100:2 and X100:4) Nominal voltage | | AC | 230 | ٧ | | | | | |
| | | or | AC | 110 | V | | | | | |
| | | or | AC | 24 | V | | | | | |
| | max. voltage | Um | AC | 253 | V | | | | | |
| 1.2 | Power supply (sensor) circuit (terminals X201:1 a | and X201:3), | level of p | rotection Ex ia II | С | | | | | |
| | Voltage | Uo | DC . | 8.6 | V | | | | | |
| | Current | lo | | 925 | mΑ | | | | | |
| | Power | Po | | 1.17 | W | | | | | |
| | Trapezoid output characteristic | | | | | | | | | |
| 1.3 | Floating opto coupler output circuit (terminals X20 | ng opto coupler output circuit (terminals X200:3 and X200:4), level of protection Ex ia IIC | | | | | | | | |
| | Voltage | Ui | DC | 30 | V | | | | | |
| | Effective internal capacitance | Ci | | negligible | | | | | | |
| | Effective internal | Li | | negligible | | | | | | |
| 1.4 | Ambient temperature range | Ta | | -20 °C up to +60 °C | | | | | | |
| | · · · · · | | | • | | | | | | |
| 2 | Type sensor DOG-42******* and DOG-62******** | | | | | | | | | |
| | Ambient temperature range | Ta | | -20 °C up to +6 | 30 °C | | | | | |
| | | | | | | | | | | |



INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres for rules and details of the IECEx Scheme visit www.iecex.com

| Certificate No.: | IECEx BVS 13.0035 | issue No.:1 | Certificate history: |
|---|---|-----------------------------------|---|
| Status: | | | Issue No. 1 (2016-11-4) Issue No. 0 (2013-3-1) |
| Otatus. | Current | | |
| Date of Issue: | 2016-11-04 | Page 1 of 4 | |
| Applicant: | KOBOLD Messring Nordring 22-24 65719 Hofheim/Ts. Germany | g GmbH | |
| Equipment: Optional accessory: | Flow measuring sys | stem type DOG-4 | |
| Type of Protection: | Equipment protection Level (EPL) Ga | on by intrinsic safety "i", Equip | ment with Equipment Protection |
| Marking: | [Ex ia Ga] IIC for typ Ex ia IIC T4 Ga for ty | | |
| Approved for issue on be Certification Body: | ehalf of the IECEx | J. Koch | |
| Position: | | Head of Certification Body | |
| Signature: (for printed version) | | | |
| Date: | | a.M.M. | |

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 The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

DEKRA EXAM GmbH Dinnendahlstrasse 9 44809 Bochum Germany





Certificate No.:

IECEx BVS 13.0035X

Date of Issue:

2016-11-04

Issue No.: 1

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Manufacturer:

KOBOLD Messring GmbH

Nordring 22-24 65719 Hofheim/Ts. **Germany**

Additional Manufacturing location(s):

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 electrical 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 60079-11: 2011

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition: 6.0

IEC 60079-26: 2014-

Explosive atmospheres - Part 26: Equipment with Equipment Protection Level (EPL) Ga

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Edition: 3.0

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:

DE/BVS/ExTR13.0034/01

Quality Assessment Report:

DE/BVS/QAR09.0001/07



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Date of Issue:

2016-11-04

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

General product information:

The flow measuring system is intended for flow measuring of gaseous media.

The flow system consists of a transmitter which has to be mounted outside the hazardous area and a flow sensor; both apparatus can be connected via an up to 100 m long cable.

Parameters

See Annex

SPECIFIC CONDITIONS OF USE: YES as shown below:

The sensor has to be mounted in areas where ignition hazard due to impact or friction will be excluded.

The sensor has to be mounted in areas where electrostatic charging/discharging hazard will be excluded.

The connecting cable has to be in a fixed installation if the ambient temperature is below -5 °C.



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Date of Issue:

2016-11-04

Issue No.: 1

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| o variants have been ad V (marking of mains vol | ded: variants with no tage on the label). | ominal mains voltage of A | AC 110 V and with n | ominal mains voltage of A |
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Certificate No.:

IECEx BVS 13.0035 X issue No.: 1

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Parameters

| 1 1.1 | Type transmitter DOG-4 Mains circuit (terminals X100:2 and X | 100.4) | | | | | | | |
|----------|--|--------------|--------------|-------------|---------------------|----------|--------|--|--|
| 1. ! | Nominal voltage | | | AC | | 230 | V | | |
| | | or | | AC | | 110 | V | | |
| | | or | | AC | | 24 | V | | |
| | max. voltage | | U_{m} | AC | | 253 | V | | |
| 1.2 | Power supply (sensor) circuit (terminals X201:1 and X201:3), level of protection Ex ia IIC | | | | | | | | |
| | Voltage | | U。 | DC | | 8.6 | V | | |
| | Current | | lo | | | 925 | mA | | |
| | Power | | P_o | | | 1.17 | W | | |
| | Trapezoid output characteristic | | | | | | | | |
| 1.3 | Floating opto coupler output circuit (te | rminals X200 | 0:3 and X200 |):4), level | of prote | ction Ex | ia IIC | | |
| | Voltage | | Ui | DC | | 30 | V | | |
| | Effective internal capacitance | | Ci | | ne | gligible | | | |
| | Effective internal | | Li | | | gligible | | | |
| | | | <u> </u> | | 00 °C to 160 °C | | 0 °C | | |
| 1.4 | Ambient temperature range | | Ta | | -20 °C up to +60 °C | | 0 0 | | |
| 2 | Type sensor DOG-4 | | | | | | | | |
| | Ambient temperature range | | Ta | | -20 °C | up to +6 | 0°C | | |
| | Ambient temperature range | | ' a | | | | | | |