



IECEX Certificate of Conformity

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 07.0032** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 1 Issue 0 (2007-12-18)
Date of Issue: 2023-05-17
Applicant: **RECHNER Industrie-Elektronik GmbH**
Gaußstraße 8-10
68623Lampertheim
Germany
Equipment: **Capacitive level sensor type KFS-***-VA*-2G-1/2D and KFX-5-*/**-2G-1/2D For details see
"General product information"**
Optional accessory:
Type of Protection: **Encapsulation "m"; Dust ignition "t"**
Marking: Ex mb IIC T1...T6* Gb
Ex ta/tb IIIC T* Da/Db * see manual

Approved for issue on behalf of the IECEx
Certification Body:

Dr Franz Eickhoff

Position:

**Senior Lead Auditor, Certification Manager and officially
recognised expert**

Signature:
(for printed version)

Date:
(for printed version)

2023-05-17

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 www.iecex.com or use of this QR Code.



Certificate issued by:

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





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Date of issue: 2023-05-17

Issue No: 1

Manufacturer: **RECHNER Industrie-Elektronik GmbH**
Gaußstraße 8-10
68623Lampertheim
Germany

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

[IEC 60079-18:2017](#) Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

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/ExTR07.0038/01](#)

Quality Assessment Report:

[DE/BVS/QAR07.0008/13](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Description

The capacitive level sensor is used for level monitoring, controlling and regulating.

When used in silos with dust generating material the active part meets EPL Da (category 1D) and the terminal box EPL Db (category 2D), when used in hazardous gas-/air mixtures the complete capacitive level sensor meets EPL Gb (category 2G).

Type KFS* is a passive sensor without internal electronics, type KFX* is an active sensor with internal electronics.

No components used referring to older standards.

Subject and Type

See Annex

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Updating to the current standards
- A new, alternative compound is added.
- Use of an alternative fuse
- Extension of the medium temperature range
- Updating of type code

Annex:

[BVS_07.0032_Rechner_Annex_Issue1.pdf](#)



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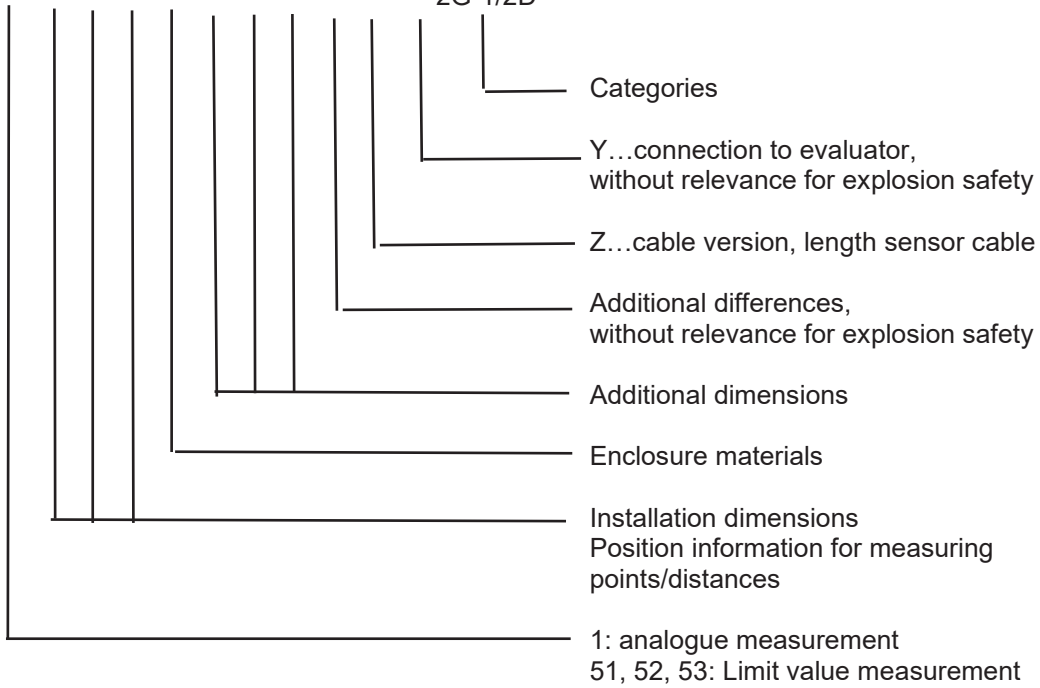


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Subject and Type

Capacitive level sensor type

KFS -***-***-***-***-***-***-***-***-***-***-2G-1/2D





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Electrical data

Type KFS-*-*-*-VA-*-2G-1/2D

Voltage DC 5...15 V
 Current limited by a fuse with a rated current of 200 mA

Type KFX-5-*-*-*/-*-*-2G-1/2D

Voltage DC 18...30 V
 Current limited by a fuse with a rated current of 200 mA

Thermal data

EPL Gb

Temp. - class	Sensor Typ KFS – ambient temperature range	Sensor Typ KFX – ambient temperature range	Medium temperature (Tp) at the electrode
T6	-20 °C...+65 °C	-20 °C...+55 °C	-20 °C...+85 °C
T5	-20 °C...+80 °C	-20 °C...+70 °C	-20 °C...+100 °C
T4	-20 °C...+100 °C		-20 °C...+135 °C
T3			-20 °C...+160 °C
T2			
T1			

EPL Da/Db

Max. surface temperature (EPL Db)	Max. surface temperature T ₂₀₀ (EPL Da)	Sensor type KFS – ambient temperature range (EPL Db)	Sensor type KFX – ambient temperature range (EPL Db)	Medium temperature (Tp) at the electrode (EPL Da)
T110°C	T165°C	-20 °C...+90 °C	-20 °C...+80 °C	-20 °C...+160 °C