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

Certificate No.:	IECEx IBE 15.0020X	Issue No: 0	Certificate history: Issue No. 0 (2015-06-09)
Status:	**Current**	Page 1 of 3	
Date of Issue:	**2015-06-09**		

Applicant: **Fritz Kübler GmbH**
Schubertstraße 47
78054 Villingen-Schwenningen
Germany

Equipment: **Encoder type 8.70XX**
Optional accessory:

Type of Protection: **flameproof enclosure "d", protection by enclosure "t"**

Marking:
Ex d IIC T4- T6 Gb

Ex tb III C T135 °C - T 85 °C Db

Approved for issue on behalf of the IECEx Certification Body: Prof. Dr. Tammo Redeker

Position: Head of Certification Body

Signature:
(for printed version)

Date:

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:

IBExU Institut für Sicherheitstechnik GmbH
Certification Body
Fuchsmühlenweg 7
09599 Freiberg
Germany

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Manufacturer:	**Fritz Kübler GmbH** Schubertstraße 47 78054 Villingen-Schwenningen **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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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/IBE/ExTR14.0060/00

Quality Assessment Report:

DE/PTB/QAR13.0003/00

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Encoders type 8.70XX used for the conversion of a rotary motion into equivalent electric or digital pulses. They are designed for use in industry hazardous areas of Zone 1 and Zone 21 . The plane cylindrical enclosure and the shaft are made of aluminum or optionally stainless steel. The shaft rotates in rolling bearings. Together with the flange and the cap, the shaft forms a flameproof shaft joint on one side. Electrical connection is realized by an integrated connecting cable (open ended line) which is brought-out by means of a separately certified cable gland.

The encoders of series 8.7020 ... , 8.7034 ... , 8.7073 ... , 8.7078 .. . , 8.7083 ... , 8.7088 ... are available in 3 variants, which differ in terms of Speed 6000 or 2000 min^{-1}), temperature class and the required IP protection (IP67 or IP65).

Speed, max.: 6000 min-1 (2000 min-1)

Rated voltage, max.: 30 V DC +10 %

Ambient temperature: -40 °C up to +60 °C

SPECIFIC CONDITIONS OF USE: YES as shown below:

The gap widths and lengths remained below / exceeded those specified in EN 60079-1: 2014, table 2. They are documented in the instruction manual.

Repairs on the flameproof joints may only be made in accordance with the manufacturer's structural specifications. Repair on the basis of the values in tables 1 and 2 of EN 60079-1 is not permitted.

The equipotential bonding respectively the grounding shall be ensured by the cultivation of the encoder to the overall system.