

## **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 TSA 22.0006X** Page 1 of 3 Certificate history:

Current Issue No: 0 Status:

Date of Issue: 2022-03-30

Scancon Encoders A/S Applicant:

> Huginsvej 8 3400 Hilleroed Denmark

Equipment: Incremental and Absolute Encoder Type REXM

Optional accessory:

Type of Protection: Flameproof 'd'

Marking: Ex db I Mb

-40°C ≤ Ta ≤ +70°C

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature:

(for printed version)

(for printed version)

**Debbie Wouters** 

**Acting Quality & Certification Manager** 

Mulant 30 March 2022

- This certificate and schedule may only be reproduced in full.
   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:

TestSafe Australia 919 Londonderry Road Londonderry NSW 2753 Australia





# IECEx Certificate of Conformity

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Date of issue: 2022-03-30 Issue No: 0

Manufacturer: Scancon Encoders A/S

Huginsvej 8 3400 Hilleroed **Denmark** 

Manufacturing Scancon Encoders A/S

locations: Huginsvej 8

3400 Hilleroed **Denmark** 

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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" Edition:7.0

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 Reports:

GB/ITS/ExTR10.0007/00 GB/ITS/ExTR10.0007/01 GB/ITS/ExTR10.0007/02

**Quality Assessment Report:** 

GB/EXV/QAR17.0015/04



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Date of issue: 2022-03-30 Issue No: 0

#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Encoder Type REXM is a small cylindrical unit (68mm in diameter with length dependent on model) containing low voltage electronic components. The enclosure is manufactured from either stainless steel or acid-proof stainless steel. The enclosure comprises of cylindrical flamepaths between the End Cap & Cover Tube and Cover Tube & Housing. The rotating shaft forms a cylindrical flamepath through the housing controlled by k & m factors and is held in place with 2 precision roller element bearings. The enclosure has one threaded cable entry fitted with either a certified M20x1.5, M25x1.5, 1/2"NPT or 3/4"NPT cable gland or an M15 integral cable gland. Both internal and external earthing is provided.

Additionally, the encoders meet IP64/65/66/67/68 (1hour/1 meter) in accordance with IEC 60529.

Electrical Specification: 4.5 to 30Vdc or 5 to 30Vdc 100mA max

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1. Minimize the risk from electrostatic discharge clean only with a damp cloth.
- 2. Temperature at the cable gland or branching point could exceed 70°C or 80°C respectively suitably rated cable must be utilized.
- 3. It is a condition of certification that the flamepaths have to comply with the manufacturers drawings and can only be repaired by the manufacturer.
- 4. The fasteners used to secure enclosure body to end shields shall have a minimum yield stress of 450 Mpa.
- 5. For models without integral cable gland use only suitably certified Ex db I Mb cable glands, thread adaptors and blanking elements.
- 6. When installed in mining areas the enclosure must be protected from high risk impacts.
- 7. It is a condition of certification that precautions must be taken to avoid dust from forming layers on the encoder.

#### Annex:

IECEx TSA 22.0006X\_lss0\_Annexe\_1.pdf



# IECEx Certificate of Conformity Annexe

Annexe for Certificate No.: IECEx TSA 22.0006X Issue No.: 0

### Drawing list pertaining to Issue 0 of this Certificate:

Drawing / Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
00131738C	1	Certification drawing – H.shaft /shaft for	3	2017-11-29
		2REX/REXM Ex dwg		
00132210C	1	Certification drawing – housing 2REXI, 2REX, REXM Ex dwg	9	2021-06-14
00132416C	1	Certification drawing – End Cap for 2REX, REXM Ex dwg	4	2021-06-14
00132417C	1	Certification drawing – Cover Tube for 2REX, REXM Ex dwg	2	2017-11-29
00132573C	1	Certification drawing – Cap for 2REX, REXM Ex dwg	3	2021-06-14
00132616C	1	Certification drawing – Cap for 2REX, REXM Ex dwg	3	2021-06-14
00141224	1	Seal Ø4,5 ZruElast 70189 Ex dwg	4	2017-11-29
00142425C	1	Certification drawing – Cable Gland M15x1	2	2017-11-29
00241009	1	Warning label for mining and surface Ex dwg	1	2018-12-11
00143108	1	Seal Ø7 ZruElast 70189 Ex dwg	7	2017-11-29
00230838C	1	Internal/external earthing 2REX/REXM	1	2017-11-29
07130086	1	Allen screw M4x16 DIN912 A4-80	5	2017-07-06
07130091	1	Allen screw M4x10 DIN912 A4-80	4	2017-11-29
07130094	1	Allen screw M4x12 ISO4762 A4-80	3	2017-05-17
07130097	1	Allen screw M4x35 ISO4762 A4-80	4	2017-05-17
06300054	1	Ring cable shoe yellow M4	1	2013-07-09
07130056	1	Allen screw M4x10 DIN912 A2-70	3	2012-10-18
07130059	1	Allen screw M4x12 DIN912 A2-70	3	2012-10-18
07130063	1	Allen screw M4x35 DIN912 A2-70	3	2012-10-18
00132087	1	Encoder type 2REXI, 2REX, REXM M & k calculation Ex dwg	3	2021-06-14
07150039	1	Washer Ø7/Ø13/x1	1	2009-09-29
00230847C	1	Certification drawing – Rotary-shaft seal	1	2018-01-18
00230849C	1	Certification drawing – O-ring Ex dwg	1	2018-01-16
00241789	4	PCB SSI	1	2021-06-14
00241814	1	SC0241-1 SC50NA Magnetic Multiturn	3.0	2021-09-16
00141198	1	REXM ordering code Ex dwg	16	2021-06-14
00141199	1	REXM marking label Ex dwg	6	2021-06-14
00240841	3	Type REXM Installation Guide	3	2022-02-22
00241862	1	REXM Marking Label TSA	1	2022-02-22

### Certificate issued by:



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