

TYPE-EXAMINATION CERTIFICATE

- 1. Type-examination Certificate (Module A)
- 2. Equipment or Protective System intended for use in potentially explosive atmospheres (Directive 2014/34/EU)



3. Type examination certificate Nr ITS 09 ATEX 46134 X

4. **Product:** Incremental and Absolute Encoder Type 2CEX

5. **Manufacturer:** Scancon Encoders A/S **Applicant:** Scancon Encoders A/S

6. Address: Huginsvej 8, 3400 Hilleroed, Denmark Address: Huginsvej 8, 3400 Hilleroed,

Denmark

- 7. This product and any acceptable variation thereto are specified in the schedule to this certificate and therein referred to.
- 8. INTERTEK ITALIA S.p.A., certifies that the equipment or protective system has been found to comply with the essential Health and Safety Requirements relating to the design and construction of equipment and protective system intended for use in potentially explosive atmosphere, given in Annex II of the Directive.
 - The examination and tests results are recorded in confidential technical evaluation Intertek Reports: ETS3521 dated 17 February 2009, 101936470MAN-001 dated March 2015, 103448013CHE-001 dated 07 May 2019.
- 9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with standards EN IEC 60079-0:2018, EN 60079-15: 2010 and EN 60079-31: 2014 except in respect of those requirements referred to at item 16 of the Schedule
- 10. If the sign X is placed after the certificate number, it indicates that the product is subject to Special Conditions for Safe Use specified in the schedule to this certificate.
- 11. This Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- 12. The marking of the product shall include the following:



II 3G Ex nA IIC T4 Gc II 3D Ex tc IIIC T100°C Dc

Tamb: -40°C to +70°C*
*The upper temperature may vary depending on the connector

type but must not exceed +70°C.

6th December 2019

Certificate issue date

Fabrizio Massei Certification Officer

Certification Officer Intertek Italia S.p.A.

This certificate has been issued by Intertek Italia S.p.A. on transfer from Intertek Testing & Certification Ltd. using the same issued original certificate number.



This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.





SCHEDULE

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13. DESCRIPTION OF THE EQUIPMENT OR PROTECTIVE SYSTEM

The Incremental and Absolute Encoder type 2CEX is a small aluminum or stainless steel enclosure containing electronics, shaft or hollow shaft. The shaft is designed with 2 precision ball bearings and various external configurations. All external connections are provided through one connector (either MIL-spec or ATEX approved connector). The enclosure measures approximately 62mm x 90mm x 70mm.

Additionally, the equipment has been found to meet IP64/65/66/67 in accordance with IEC 60529.

14. DRAWINGS AND DOCUMENTS

TITLE	DOCUMENT Nr	LEVEL	DATE
Certification drawing – 2CEX Cap/enclosure Ex dwg	00231029C	1	11-01-2019
Certification drawing – 2CEX shaft/h.shaft Ex dwg	00231030C	1	11-01-2019
Certification drawing 2CEX – Housing Ex dwg	00231031C	1	11-01-2019
2CEX numbering code Ex-dwg.	00149756	7	11-01-2019
2CEX marking label Ex-dwg	00141424	7	11.01.2019
2CEX marking label – connector Ex-dwg.	00241035	1	11.01.2019
Warning Label 2QEX Ex dwg	00143126	3	12-10-2018
Type 2CEX Installation Guide	00141486	2	11 JANUARY 2019
2CEX internal/external earthing Ex dwg	00231036	1	11-01-2019
Certification drawing – Rotary-Shaft Seal	00230847C	1	18-01-2018
Certification drawing – O-ring Ex dwg	00230849C	1	16-01-2018
PCB SC0241 component and layout details – Absolute SSI encoder 2CEX	00241038	1	11-01-2019
PCB SC0803 component and layout details – Incremental encoder 2CEX	00241039	1	11-01-2019

Copies of the above listed documents are kept at Intertek Italia S.p.A. archive.

15. SPECIAL CONDITIONS FOR SAFE USE

- Connectors must have their dust covers immediately put fully back in position when the connectors are not in use.
- Potential electrostatic charging hazard see instructions.





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16. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

The relevant essential Health and Safety Requirements have been identified and assessed in Intertek Reports: ETS3521 dated 17 February 2009, 101936470MAN-001 dated March 2015, 103448013CHE-001 dated 07 May 2019.

17. ROUTINE (FACTORY) TESTS

• A dielectric strength test shall be carried out in accordance with clause 23.2.1 of EN 60079-15:2010 between the live/neutral supply pins and earth. Test voltage 500V r.m.s. (+5%,-0%). Test duration minimum of 60 seconds. Alternatively, the test shall be carried out at 1.2 times the above test voltage but shall be maintained for at least 100ms. The use of a d.c. test voltage is allowed as an alternative to the specified a.c. test voltage and shall be at 140% of the specified a.c. r.m.s test. Details of test must be recorded and records maintained.

18. **DETAIL OF CERTIFICATE CHANGES**

None