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-I24ATEX39692X R.0**
4. **Product:** Optic or Magnetic Encoder – Type SCH68BEX, SCH68FEX and SCA68EX
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 Report Nr. 105676550CHE-001 dated 26th January 2024.
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018 and EN IEC 60079-7:2015/A1:2018 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 3 G Ex ec IIC T4 Gc
-40°C ≤ Tamb ≤ +65°C*
* Upper ambient can be any value between +20°C and +65°C to meet customer requirements.

05 February 2024

Certificate issue date

Todd L. Relyea
Certification Officer
Intertek Italia S.p.A.

SCHEDULE

TYPE EXAMINATION CERTIFICATE NUMBER: ITS-I24ATEX39692X R.0

13. DESCRIPTION OF THE EQUIPMENT OR PROTECTIVE SYSTEM

The Type SCH68BEX, SCH68FEX and SCA68EX are Optic or Magnetic Encoders housed in either an aluminium or stainless steel enclosure. It has either a solid or hollow shaft and the external shape of the enclosure can vary depending on application. The cap of the enclosure forms an interference fit with the housing and is secured via Qty 3 M2.5 fasteners. The encoder is supplied pre-wired with either certified cable gland, certified Ex e or Ex d connector or MIL connector. External earth connection point is provided.

The encoder meets the minimum requirement of IP64 in accordance with EN IEC 60079-0 and additionally can be marked IP65, IP66 and IP67 in accordance with EN 60529 (depending on cable gland/connector that is fitted).

14. DRAWINGS AND DOCUMENTS

TITLE	DOCUMENT Nr	LEVEL	DATE
Certification drawing – Housing for SC68EX – Ex dwg	00232201C	1	04-12-2023
Certification Shaft/Hollow Shaft SC68EX – Ex dwg	00232215C	1	04-12-2023
Certification drawing – Internal & External earthing SC68EX Ex dwg	00232247C	1	04-12-2023
Certification drawing – O-ring Ex dwg	00232257C	1	04-12-2023
Certification drawing – Rotary Shaft Seal Ex dwg	00232258C	1	04-12-2023
Certification drawing – internal connections Ex dwg	00242274C	1	04-12-2023
Certification drawing – Cap SC68Ex with MIL connector Ex dwg	80232200C	1	04-12-2023
Certification drawing – Cap with cable gland Ex dwg	80232217C	1	04-12-2023
Certification drawing – Cap with Ex e/Ex d approved Conn. Ex dwg	80232243C	1	04-12-2023
Certification drawing – General information Ex dwg	90232200C	1	04-12-2023
PCB – SC68EX Optic	00232259	1	04-12-2023
PCB – SC86EX Magnetic	00232260	1	04-12-2023
SC68EX marking label Ex-dwg.	00242216	1	04.12.2023
SC68EX ordering code Ex-dwg.	00242248	1	04.12.2023
Warning Label for encoder with connector Ex dwg	00242249	1	04-12-2023
Type SC68EX Installation Guide	00232244	1	04 Dec. 2023

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

SCHEDULE

TYPE EXAMINATION CERTIFICATE NUMBER: ITS-I24ATEX39692X R.0

15. **SPECIFIC CONDITIONS OF USE**

- Potential electrostatic charging hazard – see instructions.
- The equipment shall only be used in areas of at least pollution degree 2, as defined in IEC 60664-1.

16. **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS**

The relevant Essential Health and Safety Requirements have been identified and assessed in Intertek Report Nr. 105676550CHE-001 dated 26th January 2024.

17. **ROUTINE (FACTORY) TESTS**

- A dielectric strength test shall be carried out in accordance with Clause 6.1 of EN IEC 60079-7:2015/A1:2018 between the conductors 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.