

EU TYPE-EXAMINATION CERTIFICATE

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



3. EU type examination certificate Nr **ITS 09 ATEX 16831X**

4. **Product:** ExJB Fibre Optic Junction Box

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., Notified Body n° 2575 in accordance with article 17 of the Directive 2014/34/EU of the European Parliament and Council of the 26 February 2014, 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: 09041062A to D dated 23 February 2010, 101936470MAN-001 dated March 2015, and 103448020CHE-001 dated 18 July 2019.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with standards EN IEC 60079-0:2018, EN 60079-1: 2014 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 EU-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 2 G Ex db IIC T6 Gb
II 2 D Ex tb IIIC T85°C Db
Tamb: -20°C to +70°C

6th December 2019
Certificate issue date



Fabrizio Massei
Certification Officer
Intertek Italia S.p.A. (NB 2575)



PDR N° 277B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC

Signatory of EA, IAF and ILAC Mutual Recognition Agreements

This certificate has been issued by Intertek Italia S.p.A. NB 2575 on transfer from Intertek Testing & Certification Ltd. (NB 0359) 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.

Intertek Italia S.p.A. Via Miglioli, 2/A - 20063 Cernusco sul Naviglio, Milano - Italy



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13. DESCRIPTION OF THE EQUIPMENT OR PROTECTIVE SYSTEM

The Fibre Optic Junction Box system is designed to prevent, as much as possible, encoder degradation over distance. This is accomplished by connecting an encoder to the transmitting box which converts the digital signals to fibre optical signals. The signals are transmitted over fibre optic cable to the receiver box which converts the signals back to digital format. The receiver box, which is connected to the customer's controller/counter/ PLC, then transmits the data for processing.

The enclosure is an aluminum alloy flameproof enclosure designed to be installed in Zone 1/21 areas. The enclosure consists of two parts, a body and lid, which are held together with four M8 stainless steel fasteners. There are four M20 threaded entries for use with suitably approved cable glands. There are two model variations (Transmit or Receive), with the enclosure remaining common to both. Suitable external and internal earthing is provided.

Dimensions (approximate): 160x150x65 mm

The optical radiation output of the apparatus with respect to explosion protection is covered in this certificate based on Exception 3) to the scope of IEC 60079-28:2015.

CE Marking shall be accompanied by the identification number of the Notified Body responsible for surveillance of production.

14. DRAWINGS AND DOCUMENTS

TITLE	DOCUMENT Nr	LEVEL	DATE
Certification drawing – EXJB General arrangement Ex dwg	90231132C	1	22-05-2019
Certification drawing – EXJB Cover Ex dwg	00231133C	1	22-05-2019
Certification drawing – EXJB Housing Ex dwg	00231134C	1	22-05-2019
Certification drawing – EXJB Enclosure Ex dwg	90231135C	1	22-05-2019
Certification drawing – EXJB Earthing Ex dwg	90231136C	1	22-05-2019
Certification drawing – EXJB Flamepaths Ex dwg	90231137C	1	22-05-2019
Allen Screw M8x14 DIN 912 A2-70	07160001	2	13-07-2011
Marking Label ExJB Ex dwg	00131168	13	22-05-2019
ExJB Ordering code Ex dwg	00131181	4	22.05.2019
Fiber Optic Junction Box Installation Guide	00141795	2	22-May-2019

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



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15. SPECIAL CONDITIONS FOR SAFE USE

- No modifications must be made to the flamepaths of the enclosure.
- Fasteners used to secure cover of the junction box must be stainless steel grade A2-70 with a minimum yield stress of 450MPa.
- Only suitably certified Ex db IIC Gb/Ex tb IIIC Db, rated for a service temperature range of -20°C to +70°C, or better cable glands and blind plugs shall be utilised. When fibre optic cable is used, glands must be suitably certified for use with the type of cable so as to maintain the type of protection (Ex db/Ex tb).

16. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

The relevant essential Health and Safety Requirements have been identified and assessed in Intertek Reports: 09041062A to D dated 23 February 2010, 101936470MAN-001 dated March 2015, and 103448020CHE-001 dated 18 July 2019.

17. ROUTINE (FACTORY) TESTS

- All enclosures must be subjected to an Overpressure Test in accordance with the requirements of EN 60079-1 Clause 16.1 at a test pressure of 11.84bar. No permanent deformation or damage shall occur and all results shall be recorded.

18. DETAIL OF CERTIFICATE CHANGES

None