



QPS Evaluation Services Inc



(1) EU-Type Examination Certificate

(2) **Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014**

(3) EU-Type Examination Certificate Number: QPS24ATEX5009X Issue Number: 0

(4) Product: Shaft and Hollow-Shaft Encoders SCA88EX, SCH88BEX & SCH88FEX

(5) Manufacturer: Scancon Encoders A/S

(6) Address: Huginsvej 8
3400 Hilleroed
Denmark

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) QPS Evaluation Services Inc. 81 Kelfield St., Units 7-9, Toronto, ON M9W 5A3, Canada, Notified Body Number 2900, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number ATX1192-1
Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

(9)

EN IEC 60079-0 : 2018

EN 60079-1 : 2014

EN 60079-31 : 2014

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of 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 2014/34/EU article 13 apply to the manufacturing process and supply of this product. These are separately certified and not covered by this certificate.

(12) The marking of the product shall include the following:



II 2 G Ex db IIC T5 Gb
II 2 D Ex tb IIIC T100°C Db
Ta = -40°C to +70°C

Date of certification: 23 January 2024

Rob Kohuch
Certification Manager
QPS Evaluation Services Inc.



EU-Type Examination Certificate without signature shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by QPS Evaluation Service Inc. The SCC Accreditation Symbol is an official symbol of the accreditation body and notifying authority, used under license.

(13) **SCHEDULE**(14) **to EU-Type Examination Certificate QPS 24ATEX5009X**Issue No. **0**(15) **Description and Electrical data**

The Absolute Encoder types SCA88EX, SCH88BEX and SCH88FEX are small encoders manufactured from stainless steel or aluminium available in a “U” shape with approximate dimensions of 134mm x 75mm x 90mm. These encoders are populated with electronics and have a shaft passing through the main body. The shaft may be solid or hollow and with one or two ends free. The encoder contains a backup battery: primary lithium battery of type XL-050H (lithium thionyl chloride – Li-SOCl₂), size – ½ AA, 3.6 V nominal. The battery is not supposed to be replaced in a lifetime of the encoder.

Rotation Speed of the encoder shaft is limited to 3000 rpm.

The encoder designations detail:

SC*88*Ex - *** - **** - ** - ** - ** - ** - ** - **** - *

A J B C D E F G H I

A..... Main Type of Encoder

SCA88EX – Solid Shaft

SCH88BEX – Through Hollow Shaft

SCH88FEX – Hollow Shaft

J.... Type of encoder (Optional) (2PB, 1SS, 1CA, 1DV, 1EE, 1TE, etc.)

B..... Pulse/revolutions (e.g. 1213)

C..... Material of Housing and Body

AISI 303 (SR)

AISI 316 (SA)

EN AW-6026 (AL) or EN AW-6026LF (AL)

D..... Output Signal (e.g. DP, G, B, etc)

E..... Diameter of Hollow Shaft (e.g. 03)

F..... Length of Shaft or Max Depth of Hollow Shaft (e.g. 00)

G..... IP Rating (e.g. 66)

H..... Type and Placement of Cable Outlet (e.g. EC02)

I..... Type of Flange Body (e.g. A)

(16) **Report Number: ATX1192-1**



(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate QPS 24ATEX5009X**

Issue No. **0**

(17) **Specific conditions of use:**

- No modifications may be made to the flamepaths of the enclosure without consultation to the manufacturer's drawings.
- No user replaceable items inside – including internal backup battery.
- Use only fasteners with property class A4-80 with a yield stress \geq 600 MPa.
- Use only suitably certified Ex d/db and/or Ex tb cable glands, blanking elements, and thread adapters.
- To minimize the risk from electrostatic discharge – clean only with a damp cloth.
- It is a condition of certification that the precautions must be taken to avoid dust from forming layers on the encoder.
- Temperatures at the cable entry can reach 90°C. Selection of cable and cable entrance devices must be appropriate for the ambient temperature range in which the product is used.

(18) **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.

(19) **Remarks and additional information: none**

(20) **Certificate history**

Issue 0 - 250123; Initial certificate.