



# EU Type Examination Certificate CML 19ATEX1098X Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment Incremental Encoders SCA24EX & SCH24EX
- 3 Manufacturer Scancon Encoders A/S
- 4 Address Huginsvej 8, 3400 Hilleroed, Denmark
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Hoogoorddreef 15, Amsterdam, 1101 BA, The Netherlands, Notified Body Number 2776, 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 equipment 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 the confidential reports listed in Section 12.

- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-1:2014

EN 60079-31:2014

10 The equipment shall be marked with the following:

έx/ 'II 2 GD

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

D R Stubbings Technical Director





### 11 Description

The Incremental Encoders Type SCA24EX & SCH24EX is a small cylindrical unit with a diameter of about 24 mm and a length of about 45 mm depending on the angle of the cable entry. The encoder contains low voltage electronics. The shaft can be either a solid or a hollow type.

The housing can be designed in 3 different type variants:

- Straight body with cable entry at the end
- Cable entry at an angle of 24°
- Cable entry at an angle of up to 90°

The housing is manufactured of aluminium or stainless steel with a brass flange.

The unit comprises three flame-paths:

- A cylindrical joint between endcap and body
- A threaded cable entry gland
- A cylindrical rotating shaft held in place with 2 precision roller bearings

Rated speed max 3000 rpm Max. permissible load on the shaft: axial 10 N / radial 20 N 5 to 24 V dc, 100 mA

#### Nomenclature:

The nomenclature for types SCA24EX & SCH24EX is specified in accordance with the manufacturer's drawing no. 00142294:

### 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	23 Aug 2019	R12676A/00	Issue of Prime Certificate

Note: Drawings that describe the equipment or component are listed in the Annex.

#### 13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

i. Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.





## 14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

- i. The flameproof joints shall not be repaired by anyone other than the manufacturer. Contact the manufacturer for more information.
- ii. The equipment is a potential electrostatic charging hazard and therefore shall only be cleaned with a damp cloth.
- iii. The encoder is fitted with a fixed cable and cable gland arrangement. The arrangement shall not be repaired or replaced by anyone other than the manufacturer. Contact the manufacturer for more information.
- iv. The cable shall be secured to avoid any additional stresses on the cable or gland. Alternatively, the encoder may be mounted in another enclosure that provides protection to the cable arrangement.

# **Certificate Annex**

Certificate NumberCML 19ATEX1098XEquipmentIncremental Encoders SCA24EX & SCH24EXManufacturerScancon Encoders A/S



The following documents describe the equipment or component defined in this certificate:

## Issue 0

Drawing No	Sheets	Rev	Approved date	Title
00142295	1 of 1	4	23 Aug 2019	SC24EX marking label
00142294	1 of 1	3	23 Aug 2019	SC24Ex numbering code
00132232	1 of 1	3	23 Aug 2019	Cable gland SC24EX M12x1 Ø5
00132120	1 of 1	2	23 Aug 2019	Seal for cable gland SC24EX Ø10,5/Ø4,5/6
00132121	1 of 1	1	23 Aug 2019	Seal for cable gland SC24EX Ø10,5/Ø5/6
00132381C	1 of 1	3	23 Aug 2019	Certification drawing – housing SC24EX
00132410C	1 of 1	4	23 Aug 2019	Certification drawing – Encoder cap SC24EX
00132382C	1 of 1	3	23 Aug 2019	Certification drawing – shaft for SC24EX
00231093C	1 of 1	1	23 Aug 2019	Certification drawing – Hollow shaft SC24EX
90231121C	1 of 1	1	23 Aug 2019	Certification drawing – Enclosure
90231122C	1 of 1	1	23 Aug 2019	Certification drawing – Earthing
90231123C	1 of 1	1	23 Aug 2019	Certification drawing – General arrangement
00132375	1 of 1	3	23 Aug 2019	Encoder type SC24Ex m&k calculation
00142363	1 of 1	2	23 Aug 2019	Washer SC24Ex Ø5/Ø10,5/1
00142378	1 of 1	4	23 Aug 2019	Encoder type SC24EX gaps length/width