

UK-TYPE EXAMINATION CERTIFICATE

Product or Protective Systems Intended for Use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

- UK-Type Examination Certificate Number:** ITS22UKEX0669X **Issue 00**
- Product:** Shaft Encoder Type 01-09
- Manufacturer:** Eltomatic A/S
- Address:** Fabrikvej 6, 9490, Pandrup, Denmark
- This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- Intertek Testing and Certification Limited, Approved Body number 0359, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential report 105238178CHE-001 dated 13^h April 2023.
- Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018 and EN 60079-1:2014 except in respect of those requirements referred to within item 14 of the Schedule.
- If the sign “X” is placed after the certificate number, it indicates that the product is subject to the special conditions of use specified in the Schedule to this certificate.
- This UK-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- The marking of the product shall include the following:



II 2 G Ex db IIB T6 Gb
-30°C ≤ Ta ≤ +60°C

Certification Officer: _____

R Tunnicliffe

Date: _____

21 April 2023

SCHEDULE:

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11. Description of Product or Protective System

The electronics of the shaft encoder is installed in a flameproof enclosure with a view to being mounted directly on the corresponding gearbox. The counter disc built-in into the enclosure, with a corresponding optical tracking, is activated from the gearbox by a leading-in shaft. The connection cable mounted by the manufacturer is lead into the enclosure through a cemented stopping box, which is a part of the enclosure.

Technical data:

Permitted range of the ambient temperature	-30°C to +60°C
Maximum rated voltage	4.5VDC to 32VDC
Maximum rated current	60mA
Maximum rotation speed	1000RPM
Pulses per revolution	1 to 500

12. Report Number

Intertek Report: 105238178CHE-001 dated 13th April 2023.

13. Special Conditions of Certification

(a). Special Conditions of Use

- Permitted range of ambient temperature: -30°C to +60°C.
- The encoder is constructed with a permanently connected unterminated cable, which must be connected in a safe area or a certified junction box in accordance with the ATEX/UKEX system.
- It is a condition of certification that the flame paths have to comply with the manufacturers drawings and can only be repaired by the manufacturer.
- The M4 screws have the property class 8.8.

(b). Conditions of Manufacture - Routine Tests

- All Encoders must be subjected to a routine overpressure test in accordance with the requirements of EN 60079-1:2014 Clause 16.1.1 at a test pressure of 3.75bar. All tests must be recorded.

14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Report: 105238178CHE-001 dated 13th April 2023.

SCHEDULE:

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15. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
Certification dwg – General assembly Encoder 01-09 Ex dwg	E00640109	1	07-11-2022
Certification dwg - Enclosure - joints Encoder 01-09 Ex dwg	E00740109	1	07-11-2022
Certification drawing - Housing 01-09 - Ex dwg	E700530C	1	07-11-2022
Certification drawing - Cover 01-09 - Ex dwg	E700508C	1	07-11-2022
Certification drawing - Bearing Needle Roller - Ex dwg	E620028C	1	07-11-2022
Certification drawing - Flame Bush 01-09 - EX dwg	E650004C	1	07-11-2022
Marking Label for 01-09 Ex-dwg.	592436	A	07.11.2022
Encoder type 01 - 09 – Pressure test procedure	E00240109	2	13.02.2020
Encoder type 01-09 Instructions for safe installation	E00840109	1	07.11.2022
Specification - Potting Compound CW5631/HY5610	E00241000	-	January 2011
Parts List	40.2521A.125_GB	0.1	03.06.09
PBA09 Main 4.5V-25V Totem	40.2520C.100.T	4	22-01-2008
PBA09 Placement 3010B 07_3010B	3010C_3B	1	22-01-2008
PCB 40.3200	E00141501	1	13.02.2020
Hardware variant 15-01-RS485 for Eltomatic encoder type OE01-09	E00241501	1	09.02.2023
Hardware variant 15-02 for Eltomatic encoder type OE01-09	E00940109	1	11.11.2022

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