

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:** ITS21UKEX0358X **Issue 00**
- Product:** Electronic Encoder Type 01-08
- 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 104759828CHE-001 dated 1st November 2021.
- 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



-25°C/-30°C* ≤ Ta ≤ +60°C/+70°C*

*see Schedule for details

Certification Officer: _____

P Moss

Date: _____

05 November 2021

SCHEDULE:

UK-Type Examination Certificate Number: ITS21UKEX0358X Issue 00

11. Description of Product or Protective System

The incremental shaft encoder 01-08 is designed for heavy-duty application in environments where potentially explosive atmospheres can be expected (Gas group IIB).

The electronics of the pulse generator is designed as a metallic “d” enclosure which is intended for mounting directly on the corresponding gearbox. The counter disc is built-in into the enclosure, with a corresponding optical tracking, which 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 integrated in the enclosure.

Technical data

Type variants covered: Encoder type name: 01-08

It can be delivered with a different number of channels (1-channel, 2-channels or 3-channels)

Electrical data

Supply voltage range 5 to 24 VDC, max 100 mA

Maximum measurable rotating speed: 1000 rpm

Ambient temperature range

-30°C to + 70°C – with fixed mounted cable

-25°C to + 60°C – with movable cable

12. Report Number

Intertek Report: 104759828CHE-001 dated 1st November 2021.

13. Special Conditions of Certification

(a). Special Conditions of Use

- Permitted range of the ambient temperature: -30°C to +70°C with fixed mounted cable and -25°C to +60°C with movable cable.
- The encoder cable must be routed and externally fixed in such a way that it is protected from mechanical damage.
- The encoder is constructed with a permanently connected cable, which must be connected in a safe area or by use of a certified “e” or “d” junction box certified in accordance with EN 60079-7 or EN 60079-1.
- The encoder shaft must be driven via a coupling arrangement that allows some radial and axial movement, otherwise damage to the shaft bearings may occur.
- No modification must be made to the flamepaths.

(b). Conditions of Manufacture - Routine Tests

- None

SCHEDULE:

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14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Report: 104759828CHE-001 dated 1st November 2021.

15. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
Marking Label for 01-08 Ex-dwg.	592468	A	23.07.2021
Certification drawing - Bearing Needle Roller - Ex dwg	E600004C	1	23-07-2021
Certification dwg – General Assembly Encoder 01-08 Ex dwg	E00640108	1	23-07-2021
Certification drawing - Flame Bush 01-08 - Ex dwg	E650000C	1	23-07-2021
Certification drawing - Cover 01-08 - Ex dwg	E700500C	1	23-07-2021
Certification drawing - Housing 01-08 - Ex dwg	E700501C	1	23-07-2021
Certification dwg - Enclosure – joints Encoder 01-08 Ex dwg	E00740108	1	23-07-2021
Encoder type 01-08 Instructions for safe installation	E00840108	1	23.07.2021