

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-I21ATEX31268X R.0**

4. **Product:** Electronic Encoder Type 01-08

5. **Manufacturer:** Eltomatic A/S

Applicant: Eltomatic A/S

6. **Address:** Fabriksvej 6, 9490, Pandrup, Denmark

Address: Fabriksvej 6, 9490, Pandrup,
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 Report Nr. 104759828CHE-001 dated 1st November 2021.

9. 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 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 IIB T6 Gb
Tamb: -25°C/-30°C* ≤ Ta ≤ +60°C/+70°C*

* See Schedule for details

Certificate issue date

05 November 2021

Paul Moss

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 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



SCHEDULE

EU TYPE EXAMINATION CERTIFICATE NUMBER: ITS-I21ATEX31268X R.0

13. DESCRIPTION OF THE EQUIPMENT 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

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
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



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TITLE	DOCUMENT Nr	LEVEL	DATE
Encoder type 01-08 Instructions for safe installation	E00840108	1	23.07.2021

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

15. SPECIAL CONDITIONS FOR SAFE 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 of the enclosure.

16. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

The relevant essential Health and Safety Requirements have been identified and assessed in Intertek Report Nr. 104759828CHE-001 dated 1st November 2021.

17. ROUTINE (FACTORY) TESTS

None.