



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX ITS 22.0029X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2023-04-21

Applicant: **Eltomatic A/S**
Fabriksvej 6
9490 Pandrup
Denmark

Equipment: **Shaft Encoder Type 01-09**

Optional accessory:

Type of Protection: **Flameproof "d"**

Marking: Ex db IIB T6 Gb
-30°C ≤ Tamb ≤ +60°C
IECEX ITS 22.0029X

Approved for issue on behalf of the IECEx
Certification Body:

R J Tunncliffe

Position:

Certification Officer

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

Intertek Testing & Certification Limited
ITS House, Cleeve Road
Leatherhead
Surrey, KT22 7SA
United Kingdom



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Manufacturer: **Eltomatic A/S**
Fabriksvej 6
9490 Pandrup
Denmark

Manufacturing
locations: **Eltomatic A/S**
Fabriksvej 6
9490 Pandrup
Denmark

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[GB/ITS/ExTR22.0033/00](#)

Quality Assessment Report:

[GB/EXV/QAR17.0004/03](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

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

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 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 IECEx 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.

Annex:

[IECEX ITS 22.0029X - Annex for IECEx Certificate of Conformity.pdf](#)



Annex to IECEx Certificate of Conformity

Certificate No:	IECEX ITS 22.0029X	Issue No. 0
Annex No. 1		

Technical 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

Required Manufacturer Routine Testing		
Test	Title/Description of Test	Standard and Clause
1	All Encoders must be subjected to a routine overpressure test in accordance with the requirements of IEC 60079-1:2014 Ed 7 Clause 16.1.1 at a test pressure of 3.75bar. All tests must be recorded.	IEC 60079-1:2014 Ed 7 Clause 16.1.1