

1 UNITED KINGDOM CONFORMITY ASSESSMENT

UK TYPE EXAMINATION CERTIFICATE

2 **Product or Protective System Intended for use in Potentially Explosive Atmospheres**
SI 2016:1107 (as amended) – Schedule 3A, Part 1

3 Type Examination Certificate No.: **EMA23UKEX0026X**

4 Product: **Electromagnetic Transmitter**
EMTx40 series

5 Manufacturer: **Online Electronics Limited**

6 Address: **Online House, Blackburn Business Park, Woodburn Road,**
Aberdeen, AB21 0PS,
United Kingdom

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Element Materials Technology, Approved Body number 0891, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, SI 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 **TRA-060420-33-00A**.


9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0:2018 EN 60079-1:2014

Except in respect of those requirements listed at section 18 of the schedule.

10 If the sign “X” is placed after the certificate number, it indicates that the product is subject to specific conditions of use specified in the schedule to this certificate.

11 This 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.

12 The marking of this product shall include the following:

 **II 2 G Ex db IIB+H₂ T6...T5 Gb (see Description of Product for a table of rated ambient temperatures)**

This certificate and its schedules may only be reproduced in its entirety and without change. This certificate is issued in accordance with the Element Materials Technology Ex Certification Scheme.

S.P. Winsor

S P Winsor, Certification Manager

Issue date: 2024-01-02

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13 SCHEDULE TO UK TYPE EXAMINATION CERTIFICATE

14 CERTIFICATE NUMBER EMA23UKEX0026X

15 Description of Product

The EMTx40 series transmitter is an electromagnetic transmitter that can be used for PIG tracking and location functions, intended for use in pipeline diameters of 10” and above. The transmitters operate effectively in every type of pipeline, i.e. top-side, buried, gas or liquid and in pipeline bundles where acoustic transmitters are less effective.

The EMTx40 range is comprised of pipeline PIG monitoring transmitters housed in a titanium cylindrical enclosure with bronze alloy end caps. The equipment is powered by either 4x or 5x ‘D’ cells in series – permitted cell types are: Energizer E95, Saft LS 33600 or Procell Constant PC1300.

The following model variants are covered on this certificate:

- EMTx40X-0D4 – 4x D cell EMTx40
- EMTx40X-0D5 – 5x D cell EMTx40

The ambient temperature range and subsequent T class is dependent on the batteries fitted and is detailed here and within the manufacturer’s instructions.

The end caps are 2.625” -12 TPI, STUB ACME thread form. One of the end caps contains the electronic PCB, and the other features an additional M8x1.25 threaded bleed screw.

16 Test report No. (associated with this certificate issue): TRA-060420-33-00A.

17 Specific Conditions of Use

1. Only use one complete set of new and identical cells.
2. Only the following permitted batteries shall be used with the corresponding ambient temperature and temperature class:

Cell type	T _{amb}	T class
Procell Constant PC1300 (LR20)	-20 °C to +54 °C	T6
Energizer E95	-18 °C to +55 °C	T6
Saft LS 33600	-40 °C to +80 °C	T5

3. Batteries must be installed into the enclosure with the orientation detailed on the markings.
4. Repair of flame paths is not permitted by the end user.
5. Do not open when an explosive atmosphere may be present.
6. Units must be installed such that ignition sources due to impact and friction sparks are excluded.
7. Where used, the bleed screw must be tightened to a torque between 4 Nm and 8 Nm. Do not exceed 8 Nm.



Attention is drawn to the operating and installation instructions which may contain useful information in relation to conditions of use.

18 Essential Health and Safety Requirements (Regulations Schedule 1)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant test reports.

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19 Drawings and Documents

The list of controlled technical documentation is given in Appendix A to this schedule.

20 Routine Tests

None.

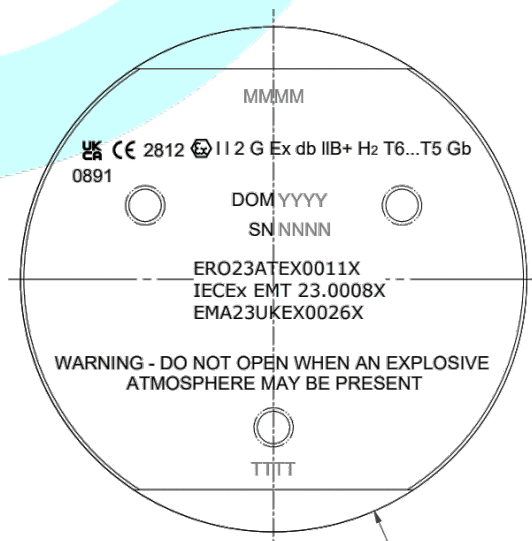
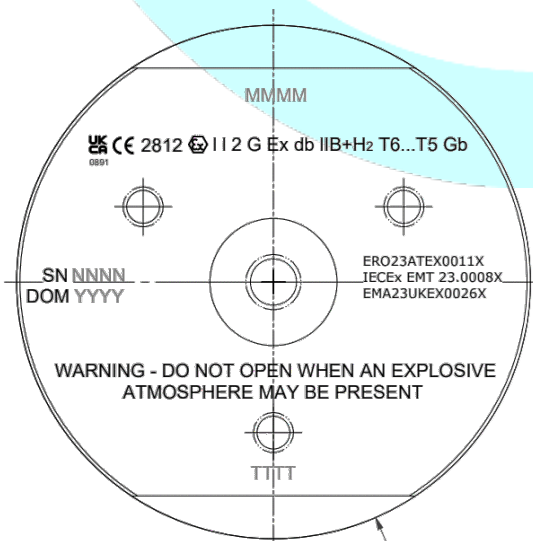
21 Photographs



22 Details of Markings

MMMM
TTTT
UK CA CE 2812 II 2 G Ex db IIB+H₂ Gb T6...T5
SN NNNN DOM YYYY
ERO23ATEX0011X IECEX EMT 23.0008X EMA23UKEX0026X
WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT
WARNING - ONLY USE ONE COMPLETE SET OF NEW AND IDENTICAL
ALKALINE 1.5V 18Ah D CELLS OR
LITHIUM THIONYL CHLORIDE 3.9V 15Ah D CELLS

← INSERT BATTERY THIS END 



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23 Certificate History

Original certificate 2024-01-02 First issue.

This certificate is a consolidated certificate and reflects the latest status of the certification, including all variations and amendments.

24 Notes to UKCA marking

In respect of UKCA Marking, Element Materials Technology accepts no responsibility for the compliance of the product against all applicable Regulations in all applications.

25 Notes to this certificate

Element Materials Technology certification reference: TRA-060420-00 (GU-ONLQ-0028).

Throughout this certificate, the date format yyyy-mm-dd (year-month-day) is used.

Approved Body 0891 is the designation for Element Materials Technology Warwick Ltd.

26 Conditions for the validity of this certificate

This certificate remains valid for so long as:

- (i) The equipment listed in section 4 is manufactured in accordance with the documents listed in Appendix A of this certificate.
- (ii) The standards listed in section 9 of this certificate continue to satisfy the Essential Health and Safety Requirements of Schedule 1 of the Regulations SI 2016:1107 (as amended by SI 2019:696) and the generally acknowledged state of the art (e.g. as determined by the publishers of those standards).

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APPENDIX A - TECHNICAL DOCUMENTS

Title:	Drawing No.:	Rev. Level:	Date:
EMTx40 ATEX IECEx UKEx file (6 sheets)	EMTx40_X001	A05	2023-12-20
EMTx40 Safety Instructions (4 sheets)	EMTx40_X002	A05	2023-12-20
EMTx40 Internal GA	EMTx40_X003	A01	2023-10-16
Housing	EMTx40_X004	A01	2023-10-16
BS Endcap	EMTx40_X005	A02	2023-11-24
PCB Endcap	EMTx40_X006	A02	2023-11-24
Bleed Screw	EMTx40_X007	A00	2023-02-24
Housing Markings	EMTx40_X008	A02	2023-11-24
PCB Layout	EMTx40_X009	A00	2023-03-20
Battery Monitoring	EMTx40_X010	A00	2023-03-20