1 **CONFORMITÉ EUROPÉENE**

EU - TYPE EXAMINATION CERTIFICATE

2 **Product or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU – Annex III**

3	EU - Type Examination Certificate No.:	**ERO21ATEX0004X (incorporating variation V1)**
4	Product:	**CD52 Standard bandit 81-XX-0080-XX-X-XXX pig passage detector (or signaler)** **CD52 Stainless steel bandit 81-XX-0090-XX-X-XXX pig passage detector (or signaler)**
5	Manufacturer:	**Control Devices Incorporated**
6	Address:	**1801 N Juniper Ave, Broken Arrow, Oklahoma 74012, United States of America**

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, Notified Body number 2812, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 Annex II to the Directive.

The examination and test results are recorded in the confidential reports **TRA-054219-33-00A and TRA-064816-32-00A.**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 **EN 60079-1:2014** **EN 60079-18:2015+A1:2017**

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 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 this product shall include the following:

Ex II 2 G Ex db mb IIB T5 Gb

See section 15 for ambient temperature marking ranges.

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, Certification Manager

Issue date: 2024-06-17

Element Materials Technology Rotterdam BV
Zekeringstraat 33, 1014 BV, Amsterdam, Netherlands
Registered in the Netherlands. Registered Office: PO Box 6854, 4802 HW, Breda, Netherlands
Company Reg. No. 24170257

13 SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

14 CERTIFICATE NUMBER ERO21ATEX0004X (incorporating variation V1)

15 Description of Product

The CD 52 stainless steel bandit pig passage detector (or signaler) are non-intrusive, PIG passage indicators. CD 52 stainless steel bandit pig passage detector (or signaler) is comprised of an interconnected Flameproof (Ex) Electronics Enclosure, Ex d Conduit Sealing Fitting, Ex d Unions, Ex d Outlet Body (Junction Box) and coupler to the Antenna pipe which is fully encapsulated.

The main electronics assembly is comprised of (Passage Information) LCD display (Display Board) and Low voltage circuitry installed (incorporating 4 PCBs – Heater Thermostat Switch Board, Heater Board, User Board and PC Board), housed in an Adalet (XIHLDGCX) Flameproof enclosure. The device can be supplied by a 24 Vdc power supply (connection supplied through terminal strip mounted in the Ex Outlet Box) or batteries housed in the Adalet Ex enclosure. Installed in the completely potted Pipe Mounting assembly are two Magnetic Transmitters that emit an electric field or two permanent magnets.

The CD 52 standard bandit pig passage detector (or signaler) has an aluminium alloy antenna base and 2 x 3/4” reducing fitting and the CD52 stainless steel bandit pig passage detector (or signaler) has a stainless steel antenna base and 2 x 3/4” reducing fitting.

The CD52 Stainless steel bandit pig passage detector (or signaller) and the CD 52 stainless steel bandit pig passage detector (or signaler) have two operations 24 Vdc and Battery and each operation has different operation temperature ranges.

Ratings:

24 Vdc; 0.029 A (29 mA); 0.70 Watts

24 Vdc; 0.065 A (65 mA); 1.6 Watts - 4-20 mA Output Option

3 V; 0.0009 A (0.9 mA); 0.0027 Watts – DURACELL PC1300

2.4 V; 0.0008 A (0.8 mA); 0.0019 Watts – ANSMANN 5035362

3.6 V; 0.0006 A (0.6 mA); 0.0022 Watts – SAFT LS33600

3.65 V; 0.0005 A (0.5 mA); 0.0018 Watts – SAFT MP176065

Ambient temperature range:

Ta = –40 °C to +70 °C (24 Vdc operation)

Ta = –20 °C to +53 °C (Duracell PC 1300 Alkaline battery operation)

Ta = –20 °C to +64 °C (Ansmann 5035362 NiMH battery operation)

Ta = –40 °C to +70 °C (SAFT LS 33600 LiSOCl2 battery operation)

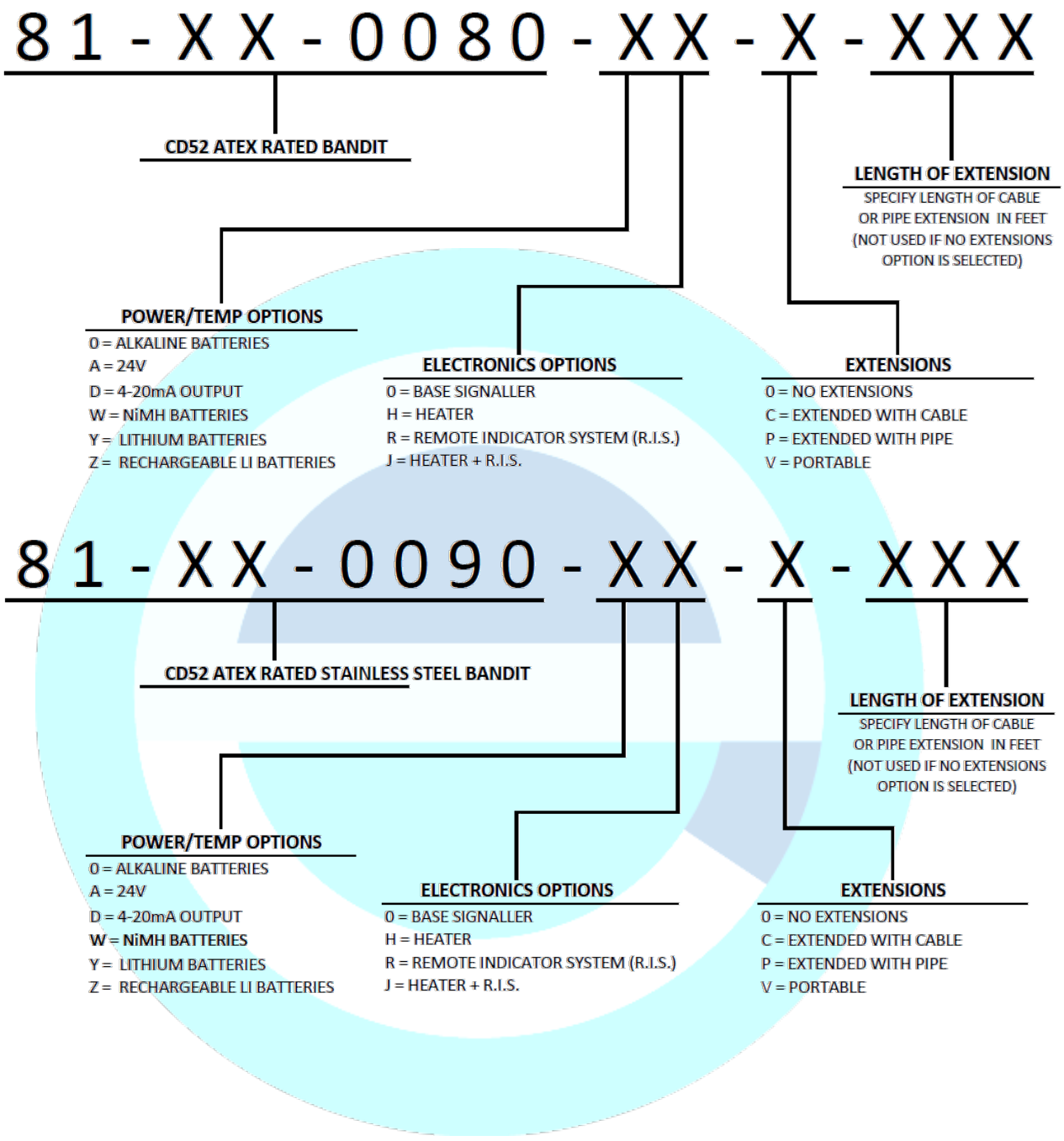
Ta = –40 °C to +70 °C (SAFT MP176065 Li-Ion battery operation)

Only product numbers 81-05-0080 and 81-05-0090 have been assessed. The manufacturer has confirmed there will be no changes to the product, but only cosmetic changes for customer orders (customer name label on display face) which will constitute part number change to 81-XX-0080 or 81-XX-0090.

SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

CERTIFICATE NUMBER ERO21ATEX0004X (incorporating variation V1)

The part number description is



16 Test Report No. (as added for this issue of the certificate): TRA-064816-32-00A.

17 Specific Conditions of Use

1. The integral cable between the junction boxes/enclosures shall be effectively clamped to prevent pulling or twisting.

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 (Directive Annex II)

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 reports.

19 Drawings and Documents

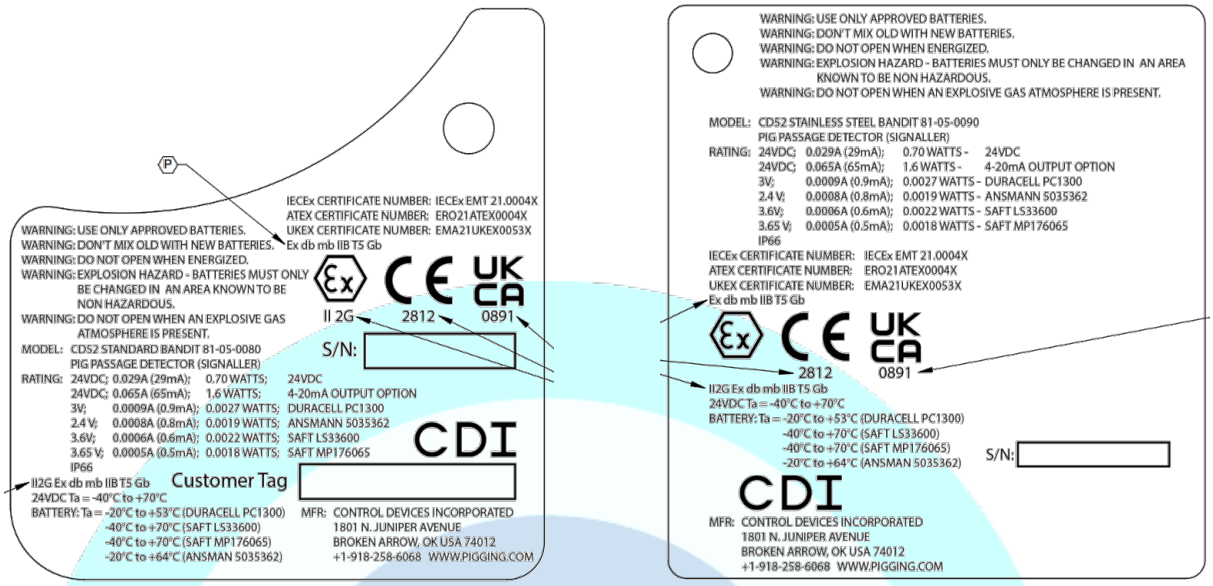
The list of controlled technical documentation is given in Appendix A to this schedule.

20 Routine Tests

1. Each piece of “m” equipment shall be subjected to a visual inspection. No damage shall be evident, such as cracks in the compound, exposure of the encapsulated parts, flaking, inadmissible shrinkage, swelling, and decomposition, failure of adhesion or softening.
2. The compound in the antenna shall be subject to a dielectric strength test at 500 Vrms for 1 sec between each circuit and all earthed parts.

21 Photographs

22 Details of Markings



Cosmetic changes for customer orders (customer name on display face) will constitute part number change to 81-XX-0080 and 81-XX-0090.

23 Certificate History

Original certificate	2021-12-14	First issue.
Variation V1	2024-06-17	Update to product markings and instructions to change EU Notified Body and UK Approved Body numbers to 2812 and 0891 respectively.

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

24 Notes to CE marking

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

25 Notes to this certificate

Element Materials Technology certification reference: ERO041508P34 (GU-CDIQ-0005).

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

Notified Body number 2812 is the designation for Element Materials Technology Rotterdam BV.

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 Annex II of Directive 2014/34/EU and the generally acknowledged state of the art (e.g., as determined by the publishers of those standards).

SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

CERTIFICATE NUMBER ERO21ATEX0004X (incorporating variation V1)

APPENDIX A - TECHNICAL DOCUMENTS

Title:	Drawing No.:	Rev. Level:	Date:
Schedule drawing CD52 Standard Bandit (Pages 1 to 8)	81-05-0080-S	P	2024-05-30
Schedule drawing CD52 Stainless steel Bandit (Pages 1 to 8)	81-05-0090-S	B	2024-05-30
CD52 Standard Bandit. Non-Intrusive Pig Passage Signaler (ATEX-IECEx and UKCA Certification) User Guide (Pages 1 to 52)	89-03-0066-00	-	2024-05-30
CD52 Stainless Steel Bandit. Non-Intrusive Pig Passage Signaler (ATEX-IECEx and UKCA Certification) User Guide (Pages 1 to 40)	89-03-0068-00	-	2024-05-30