



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 13ATEX1381X** Issue: **5**

4 Equipment: **CD52 STANDARD BANDIT PIG PASSAGE DETECTOR (or SIGNALER)**
CD52 STAINLESS STEEL BANDIT PIG PASSAGE DETECTOR (or SIGNALER)

5 Applicant: **CDI**

6 Address: **1801 N Juniper Ave**
Broken Arrow
Oklahoma 74012
USA

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

8 CSA Group Netherlands B.V., notified body number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment 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 listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012

EN 60079-1:2007

EN 60079-18:2009

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 2G

Ex d mb IIB T5 Gb

Ta = -40°C to +70°C (when supplied with 24 Vdc)

Ta = -20°C to +53°C (Battery supplied Duracell 1300)

Ta = -20°C to +64°C (Battery supplied Ansmann 5035362)

Ta = -40°C to +70°C (Battery supplied SAFT LS 33600 and MP 176065)

Project Number 80035460

Signed: J A May

Title: Director of Operations

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CSA Group Netherlands B.V.
Utrechtseweg 310,
6812 AR, Arnhem,
Netherlands



SCHEDULE

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13 DESCRIPTION OF EQUIPMENT

The CD 52 STANDARD BANDIT PIG PASSAGE DETECTOR (or SIGNALER) and CD52 STAINLESS STEEL BANDIT PIG PASSAGE DETECTOR (or SIGNALER) are non-intrusive, PIG passage indicators. CD 52 STANDARD BANDIT PIG PASSAGE DETECTOR (or SIGNALER) and CD52 STAINLESS STEEL BANDIT PIG PASSAGE DETECTOR (or SIGNALER) are 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 (orporating 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 two D-Cell alkaline 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) and the CD52 STAINLESS STEEL BANDIT PIG PASSAGE DETECTOR (or SIGNALER) have two operations 24 VDC, and Battery and each operation has different operation temperature ranges.

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.

Variation 1 - This variation introduced the following changes:

- i. The original rating included battery or 24 V dc power and external 2-wire interface to N.O. or N.C. dry contact relay. This update is applicable to only the 24 Vdc power option and is to replace the external 2-wire interface to N.O. or N.C. dry relay contact to a 4-20 mA current loop.
- ii. To permit the introduction of model number 81-06-0063. The design being different only in that it has cosmetic changes for customer orders (customer name on display face).
- iii. The recognition of design and drawing modifications; these amendments involve changes to components and design that do not affect the aspects of the product that are relevant to explosion safety, as detailed below:
 - Clarification of the use of a replacement junction box whilst correcting a typographical correction to Drawing number 81-05-0063-S for correctness:
 - Replacement of the existing 3/4" NPT Blanking Element/Stopping Plug
 - The introduction of alternative cable glands dependent upon the integral cables fitted to the equipment necessitating the introduction of new conditions
 - Replacement of the existing armoured cable with three alternative cables
 - Removal of the use of a specific type of cable gland

Variation 2 - This variation introduced the following changes:

- i. A battery powered portable model option of the previously certified CD52 model has been recognized and permitted.
- ii. Model 81-06-0080 was retrospectively recognized.



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Variation 3 - This variation introduced the following changes:

- i. The addition of three, new batteries, Ansmann 5035362, SAFT LS33600 and SAFT MP 176065, with expansion in the ambient temperature range based on the manufacturer's datasheet. Also expansion of ambient range for the already existing battery Duracell PC1300.
- ii. The recognition of Manufacturer Documents update.

Variation 4 - This variation introduced the following change:

- i. To permit the update of the notified body number shown on the marking label drawings.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	03 December 2013	R28998A/00	The release of the prime certificate.
1	14 March 2017	R70064660A	This Issue covers the following changes: <ul style="list-style-type: none"> • EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. <i>(In accordance with Article 41 of Directive 2014/34/EU, EC Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</i> • The introduction of Variation 1, as a result of the assessment, a Specific Condition of Use was introduced and therefore an 'X' suffix was added to the certificate number.
2	25 July 2017	R70133798A	The introduction of Variation 2.
3	14 February 2018	R70156914A	The introduction of Variation 3.
4	15 October 2019	0588	Transfer of certificate Sira 13ATEX1381X from Sira Certification Service to CSA Group Netherlands B.V.
5	01 April 2020	R80035460A	The introduction of Variation 4.

15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

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

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

Certificate Annexe



Certificate Number: Sira 13ATEX1381X

Equipment: Refer to Section 4

Applicant: CDI

Issue 0

Drawing	Sheets	Rev.	Date (Sira Stamp)	Title
81-05-0080-S	1 to 7	H	02 Dec 13	Schedule Drawing CD52 Standard Bandit
81-05-0063-s	1 to 7	H	02 Dec 13	Schedule Drawing CD52 Stainless Steel Bandit
89-02-0062-00	1 of 1	C	02 Dec 13	Schematic CD52 Battery Module (3V)
89-02-0002-00	1 of 1	A1	02 Dec 13	CD52-Bandit –User Board

Issue 1

Drawing	Sheets	Rev.	Date(Sira stamp)	Title
81-05-0063-S	1 to 8	K	13 Mar 17	Schedule Drawing, CD52 Stainless Steel Bandit
81-05-0080-S	1 to 8	K	13 Mar 17	Schedule Drawing, CD52 Standard Bandit

Issue 2

Drawing	Sheets	Rev.	Date(Sira stamp)	Title
81-05-0063-S	1 to 8	L	04 Jul 17	Schedule Drawing, CD52 Stainless Steel Bandit
81-05-0080-S	1 to 8	L	04 Jul 17	Schedule Drawing, CD52 Standard Bandit

Issue 3

Drawing	Sheets	Rev.	Date(Sira stamp)	Title
80-01-0100-00	1 of 1	B	25 Jan 18	Battery circuit assembly layout – Duracell and Ansmann
80-01-0119-00	1 of 1	A	25 Jan 18	Battery circuit assembly layout – LS33600
80-01-0141-00	1 of 1	A	25 Jan 18	Battery circuit assembly layout – MP176065
81-05-0063-S	1 to 8	M	26 Jan 18	Schedule drawing, CD52 Stainless Steel Bandit
81-05-0080-S	1 to 8	M	26 Jan 18	Schedule drawing, CD52 Bandit
89-02-0062-00	1 of 1	D	25 Jan 18	Schematic CD52 Battery Module (3V) ATEX version (Duracell and Ansmann)
89-02-0156-00	1 of 1	A	25 Jan 18	Schematic CD52 Battery module (3.5V Li) ATEX
89-02-0190-00	1 of 1	A	25 Jan 18	Schematic CD52 Battery module 3.6V Li SAFT 176065 ATEX
89-03-0062-00	1 of 1	B	25 Jan 18	Wiring Instructions, CD 52 ATEX Bandit
89-17-0026-00	1 of 1	A	25 Jan 18	CD52 ATEX safety components details and installation
89-17-0025-00	1 of 9	A	25 Jan 18	CD52 ATEX Compliance Details and Warnings

Issue 4. No new drawings were introduced.

Issue 5

Drawing	Sheets	Rev.	Date(Sira stamp)	Title
81-05-0063-S	1 to 8	N	16 Mar 20	Assembly, ATEX CD52 stainless steel bandit
81-05-0080-S	1 to 8	N	16 Mar 20	Assembly, ATEX CD52 bandit standard

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