



# 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](http://www.iecex.com)

Certificate No.: **IECEx KIWA 19.0018X**

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Certificate history:

Status: **Current**

Issue No: 1

[Issue 0 \(2019-09-26\)](#)

Date of Issue: 2023-11-01

Applicant: **Trimec Industries Pty. Ltd.**  
12/7-11 Parraweena Road  
Caringbah, NSW 2229  
**Australia**

Equipment: **Indicator RT14**

Optional accessory:

Type of Protection: **Intrinsic safety**

Marking: **Ex ia IIB T4 Ga**

Approved for issue on behalf of the IECEx  
Certification Body:

**Dave Magee**

Position:

**Senior Director of Operations, Toronto**

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.
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Certificate issued by:

**CSA Group**  
178 Rexdale Blvd  
Toronto Ontario M9W 1R3  
**Canada**





# IECEx Certificate of Conformity

Certificate No.: **IECEx KIWA 19.0018X**

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Date of issue: 2023-11-01

Issue No: 1

Manufacturer: **Trimec Industries Pty. Ltd.**  
12/7-11 Parraweena Road  
Caringbah, NSW 2229  
**Australia**

Manufacturing locations: **Trimec Industries Pty. Ltd.**  
12/7-11 Parraweena Road  
Caringbah, NSW 2229  
**Australia**

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 60079-0:2011](#) Explosive atmospheres - Part 0: General requirements  
Edition:6.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

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 Reports:

[NL/KIWA/ExTR19.0021/00](#)

[NL/KIWA/ExTR19.0021/01](#)

Quality Assessment Report:

[AU/TSA/QAR06.0006/11](#)



# IECEx Certificate of Conformity

Certificate No.: **IECEx KIWA 19.0018X**

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Date of issue: 2023-11-01

Issue No: 1

## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Indicator, Model RT14, is a device that is intended to indicate the flow of liquids on a LCD as well via a pulse, frequency output or a 4-20 mA current output interface.

The Indicator contains an electronics module in an enclosure made of polymer, and is either battery or externally powered.

Different kits are available to use the Indicator for integral meter-, wall-, pipe and panel mounting.

Ambient temperature range -30 °C to +70 °C

## **SPECIFIC CONDITIONS OF USE: YES as shown below:**

1. Electrostatic discharge of the enclosure shall be avoided by suitable measures.
2. Use only the intrinsically safe battery assembly (part number 1412028-EX) manufactured by Trimec Industries Pty. Ltd.



# IECEx Certificate of Conformity

Certificate No.: **IECEx KIWA 19.0018X**

Page 4 of 4

Date of issue: 2023-11-01

Issue No: 1

## **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

**Issue 1** – this Issue introduced the following changes:

1. Delete CTI specification on battery board.
2. Minimum thickness requirement for heat-shrink to be only over conductive parts on battery assembly.
3. Delete requirement for conformal coating on battery board.
4. Administrative change to label drawing.

## **Annex:**

[IECEx KIWA 19.0018X Annexe Issue 1.pdf](#)

Annexe to: IECEx KIWA 19.0018X Issue 1

Applicant: Trimec Industries Pty. Ltd

Apparatus: Indicator Model RT14



## Electrical data

### IndicatorRT14:

The indicator contains an electronics module in an enclosure made of polymer, and is either battery or externally powered. When internally powered, use only the intrinsically safe battery assembly (part number 1412028-EX) manufactured by Trimec Industries Pty. Ltd

In type of protection intrinsic safety Ex ia IIB, only for connection to a certified intrinsically safe circuit, with the following maximum values:

External Supply 24V (Terminal J2.1)	Ui=30V, Ii=100mA, Pi=750mW, Li= 0 mH, Ci= 0 $\mu$ F
Signal input circuit INPUT. (terminal J1,1)	Pulse (NPN, PNP), reed, NAMUR input circuit. Ui=30V, Ii=100mA, Pi=750mW, Li= 0 mH, Ci= 0 $\mu$ F.
Analog output circuit 4-20 mA. (terminal J3,2)	Current input circuit. Ui=30V, Ii=100mA, Pi=750mW, Li=0 mH, Ci= 0.2 $\mu$ F
Switch output (see Note) SW-and SW+(terminals J4,3 and J4,4)	Ui=24V, Ii= 200mA, Pi=0.12W, Li= 0mH, Ci=0 $\mu$ F.
Switch output 2 OUT (terminal J4,2)	Ui=30V, Ii=100mA, Pi=750mW, Li= 0 mH, Ci= 0 $\mu$ F

Note: the galvanic isolation is at least 500 VRMS between the Switch output and other circuits

In type of protection intrinsic safety Ex ia IIB, with the following maximum values:

Sensor supply V OUT (terminal J1,2)	Uo=5.4V, Io=2.4mA, Po=3.2mW, Lo= 1 H, Co= 1000 $\mu$ F.
Sensor supply 2 EXT OUT (terminal J1,4)	Uo=5.4V, Io=104mA, Po=313mW, Lo= 13.1 mH, Co= 800 $\mu$ F

## Full certificate change history

Issue 1 – this Issue introduced the following changes:

- Delete CTI specification on battery board.
- Minimum thickness requirement for heat-shrink to be only over conductive parts on battery assembly.
- Delete requirement for conformal coating on battery board.
- Administrative change to label drawing.



1 **EU-TYPE EXAMINATION CERTIFICATE**

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

3 Certificate Number: **KIWA 19ATEX0033X** Issue: **2**

4 Equipment: **Indicator Model RT14**

5 Applicant: **Trimec Industries Pty. Ltd**

6 Address: **12/7-11 Parraweena Road,  
Caringbah NSW 2229  
Australia**

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+ A11:2013 EN 60079-11:2012

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 1G

Ex ia IIB T4 Ga

Ta = -30°C to +70°C



Signed: Michelle Halliwell

Title: Director of Operations

Project Number 80816216

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## SCHEDULE

### EU-TYPE EXAMINATION CERTIFICATE

KIWA 19ATEX0033X

Issue 2

#### 13 DESCRIPTION OF EQUIPMENT

The Indicator, Model RT14, is a device that is intended to indicate the flow of liquids on a LCD as well via a pulse, frequency output or a 4-20 mA current output interface.

The Indicator contains an electronics module in an enclosure made of polymer, and is either battery or externally powered.

Different kits are available to use the Indicator for integral meter-, wall-, pipe and panel mounting.

Ambient temperature range -30°C to +70°C

#### Electrical data

##### IndicatorRT14:

The indicator contains an electronics module in an enclosure made of polymer, and is either battery or externally powered. When internally powered, use only the intrinsically safe battery assembly (part number 1412028-EX) manufactured by Trimec Industries Pty. Ltd

In type of protection intrinsic safety Ex ia IIB, only for connection to a certified intrinsically safe circuit, with the following maximum values:

External Supply 24V (Terminal J2.1)	Ui=30V, Ii=100mA, Pi=750mW, Li= 0 mH, Ci= 0 µF
Signal input circuit INPUT. (terminal J1,1)	Pulse (NPN, PNP), reed, NAMUR input circuit. Ui=30V, Ii=100mA, Pi=750mW, Li= 0 mH, Ci= 0 µF.
Analog output circuit 4-20 mA. (terminal J3,2)	Current input circuit. Ui=30V, Ii=100mA, Pi=750mW, Li=0 mH, Ci= 0.2 µF
Switch output (see Note) SW-and SW+ (terminals J4,3 and J4,4)	Ui=24V, Ii= 200mA, Pi=0.12W, Li= 0mH, Ci=0 µF.
Switch output 2 OUT (terminal J4,2)	Ui=30V, Ii=100mA, Pi=750mW, Li= 0 mH, Ci= 0 µF

Note: the galvanic isolation is at least 500 VRMS between the Switch output and other circuits

In type of protection intrinsic safety Ex ia IIB, with the following maximum values:

Sensor supply V OUT (terminal J1,2)	Uo=5.4V, Io=2.4mA, Po=3.2mW, Lo= 1 H, Co= 1000 µF.
Sensor supply 2 EXT OUT (terminal J1,4)	Uo=5.4V, Io=104mA, Po=313mW, Lo= 13.1 mH, Co= 800 µF

**Variation 1** - This variation introduced the following changes:

- Delete CTI specification on battery board.
- Minimum thickness requirement for heat-shrink to be only over conductive parts on battery assembly.
- Delete requirement for conformal coating on battery board.
- Administrative change to label drawing.

Project Number 80186216

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## SCHEDULE

### EU-TYPE EXAMINATION CERTIFICATE

KIWA 19ATEX0033X  
Issue 2

#### 14 DESCRIPTIVE DOCUMENTS

##### 14.1 Drawings

Refer to Certificate Annexe.

##### 14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
1	26 September 2019	190500004	The release of the prime certificate.
2	01 November 2023	R80186215A	The introduction of Variation 1.

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

15.1 Electrostatic discharge of the enclosure shall be avoided by suitable measures.

15.2 Use only the intrinsically safe battery assembly (part number 1412028-EX) manufactured by Trimec Industries Pty. Ltd.

#### 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.

#### 17 CONDITIONS OF MANUFACTURE

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Group Netherlands B.V. certificates.

17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

Project Number 80186216

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# Certificate Annexe



Certificate Number: KIWA 19ATEX0033X  
Equipment: Indicator Model RT14  
Applicant: Trimec Industries Pty. Ltd

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Issue 1: Refer to the report stated in section 14.2

Issue 2

Drawing	Sheets	Rev.	Date (Stamp)	Title
1312127	1 of 1	1	19 Oct 23	Battery board
1315179	1 of 1	3	19 Oct 23	RT14 label drawing
1412028	1 to 2	9	19 Oct 23	Battery Assembly

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