

### **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

IECEx BVS 15.0099X Certificate No.:

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Certificate history:

Status:

Current

Issue No: 3

Issue 2 (2018-07-30) Issue 1 (2017-06-06) Issue 0 (2015-11-26)

Date of Issue:

2022-02-14

Applicant:

Contrec Ltd.

Riverside, Canal Road

Sowerby Bridge HX6 2AY West Yorkshire United Kingdom

Equipment:

Instrument type \*.\*\*M.\*

Optional accessory:

Type of Protection:

Intrinsic Safety "i"

Marking:

Ex ia IIB T4 Gb

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature: (for printed version)

Date:

Ralf Leiendecker

Deputy Head of Certification Body

14.02.2022

1. This certificate and schedule may only be reproduced in full.

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:

**DEKRA Testing and Certification GmbH Certification Body** Dinnendahlstrasse 9 44809 Bochum Germany





## IECEx Certificate of Conformity

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Date of issue: 2022-02-14 Issue No: 3

Manufacturer: Contrec Ltd.

Riverside, Canal Road Sowerby Bridge HX6 2AY West Yorkshire United Kingdom

Additional manufacturing locations:

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

IEO 00070 44 0044

Edition:6.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

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:

DE/BVS/ExTR15.0098/03

Quality Assessment Report:

GB/SIR/QAR15.0002/04



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#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

#### Type Designation

See Annex

#### Description

The instruments of the range 200 Series provide display, control and alarm functions. Depending on the model, the apparatus have a frequency or 4-20 mA current input, 2 or 4 floating output circuits and a 4-20 mA current output.

The Model 202Ai Rate-Totaliser is a microprocessor based equipment designed to measure a 4-20 mA signal. The Model 202Ai is powered from a 4-20 mA input signal and therefore, requires no external power.

The Model 202Di Rate Totaliser is a microprocessor based equipment which accepts a frequency or pulse input from a wide range of flowmeters. Three different versions of the Model 202Di are available:

- 1 A Battery powered version with no output.
- 2 A DC powered version with either high and low flow alarms or a low flow alarm and pulse output. The instrument uses a battery pack for backup if the DC power is interrupted.
- A Loop Powered Version with 4-20 mA output and alarms as above.

  The equipment draws its operating power from the 4-20 mA loop and uses a battery pack for backup if the 4-20 mA loop is interrupted.

The equipment draws its operating power from the 4-20 mA loop and uses a battery pack for backup if the 4-20 mA loop is interrupted. The Model 214Di will operate from an external power source between 9-28 VDC. As the equipment has a battery pack it will power the instrument if DC power is interrupted.

The Model 220i is powered entirely from the 4-20 mA loop and, therefore, does not require an external power source.

The Model 250i is the same as the Model 220i apart from the software.

#### **Parameters**

See Annex

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

The equipment with plastic enclosure type \*.\*\*M shall be mounted in areas where electrostatic charge / discharge will be avoided.



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

- · One new material (stainless steel) can be used for the enclosure.
- · Minor modifications of the aluminium and stainless enclosure design.
- · New alternative to some components have been added.
- Updating of the name plate (as part of Revision Report from 2020-10-16).

#### Annex:

BVS\_15\_0099X\_Conctrec\_Annex\_issue3.pdf



### IECEx Certificate DEKRA of Conformity



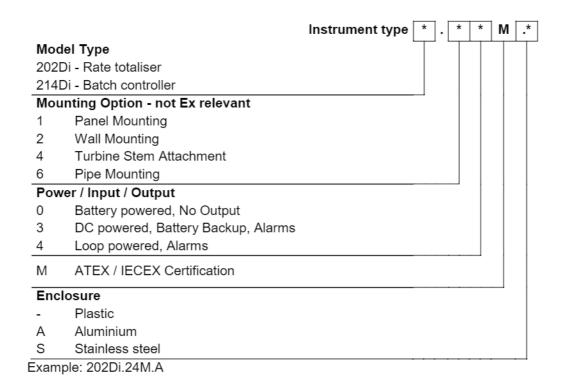
IECEx BVS 15.0099X issue No: 3 Certificate No.:

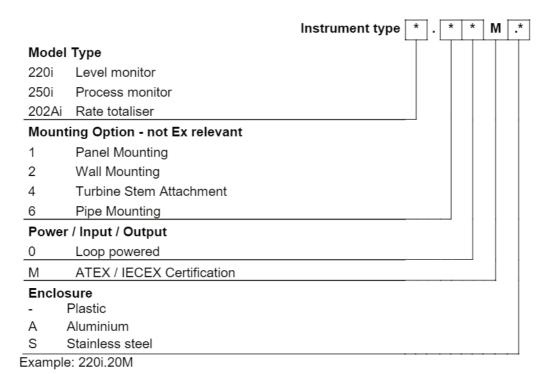
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#### Type Designation

Instrument type \*.\*\*M.\*

Instead of the asterisks in the complete designation letters and numerals will be inserted which characterise different variations.







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Parar	meters						
1	Type 202Di.*0M.*, 202Di.*3M.* and 214Di.**M.	*					
1.1	Supply and frequency input circuit terminals 7 – 8: input Only for connection of an intrinsically safe circuit with the following maximum values						
	Voltage Current Power Effective internal capacitance Effective internal inductance	Ui Ii Pi Ci Li	DC	24 20 320 20	V mA mW nF egligible		
	Or for connection of a passive circuit						
	Voltage Current Power Max. external capacitance Max. external inductance	Uo Io Po Co Lo	DC	10 9 23 20 1.5	V mA mW μF Η		
1.2	Terminals 1 – 2: supply and analog output circu	uit					
	Terminals $3-4$ and $5-6$ : digital output circuits Only for connection of an intrinsically safe circuit with the following maximum values						
	Voltage Current Power Effective internal capacitance Effective internal inductance	Ui Ii Pi Ci Li	DC	28 93 653 100	V mA mW nF egligible		
2 2.1	Type 202Di.*4M.* Terminals 7 – 8: supply and frequency input cir	cuit					
	Only for connection of an intrinsically safe circuit with the following maximum values						
	Voltage Current Power Effective internal capacitance Effective internal inductance	Ui Ii Pi Ci Li	DC	24 20 320 20	V mA mW nF egligible		
	Or for connection of a passive circuit						
	Voltage Current Power capacitance Max. external inductance	Uo Io Po Co Lo	DC	10 9 23mW 20 1.5	V mA Max. external μF H		
2.2	Terminals 1 – 2: supply and analog input circuit						
	Only for connection of an intrinsically safe circuit with the following maximum values						
	Voltage Current Power Effective internal capacitance Effective internal inductance	Ui Ii Pi Ci Li	DC	28 93 653 2	V mA mW nF egligible		



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2.3 Terminals 3 – 4 and 5 – 6: digital output circuits

Only for connection of an intrinsically safe circuit with the following maximum values

Voltage	Ui	DC	28	V
Current	l <sub>i</sub>		93	mA
Power	Pi		653	mW
Effective internal capacitance	$C_i$		100	nF
Effective internal inductance	Li			negligible

- 3 Type 202Ai.\*\*M.\*, 220i.\*\*M.\* and 250i.\*\*M.\*
- 3.1 Terminals 3 – 4: supply and analog input circuit

Only for connection of an intrinsically safe circuit with the following maximum values

Voltage	$U_{i}$	DC	28	V
Current	li		93	mA
Power	$P_i$		653	mW
Effective internal capacitance	Ci		20	nF
Effective internal inductance	Li			negligible

Terminals 5-6 and 7-8 (all models), 1-2 and 10 - 11 (for types 220i and 250i): digital output circuits

Only for connection of an intrinsically safe circuit with the following maximum values

	Voltage	Ui	DC	28	V
	Current	l <sub>i</sub>		93	mA
	Power	Pi		653	mW
	Effective internal capacitance	Ci		100	nF
	Effective internal inductance	Li			negligible
4	Ambient temperature range	Ta	-2	0 °C up	to +60 °C