

Translation

EU-Type Examination Certificate

Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

EU-Type Examination Certificate Number: **BVS 15 ATEX E 106 X** Issue **00**

Equipment: **Instrument type *.*M.***

Manufacturer: **Contrec Limited**

Address: **Unit G8, Lowfields Business Park, Navigation Way,
Elland HX5 9HB, United Kingdom**

This product and any acceptable variations thereto are specified in the appendix to this certificate and the documents referred to therein.

DEKRA Testing and Certification GmbH, Notified Body number 0158, 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 Report No. BVS PP 15.2187 EU. This issue of the EU-Type Examination Certificate replaces the previous issue of the EU-Type Examination Certificate BVS 15 ATEX E 106 X including supplements 1 to 3.

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

EN IEC 60079-0:2018 **General requirements**
EN 60079-11:2012 **Intrinsic Safety "i"**

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

This EU-Type Examination Certificate relates only to the technical design of the specified product in accordance with the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following:

 **II 2G Ex ia IIB T4 Gb**

DEKRA Testing and Certification GmbH
Bochum, 2025-04-29

Signed: Oliver Brumm

Managing Director

13 **Appendix**
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15 **Product description**

15.1 **Subject and type**

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

Instrument type

*	.	*	*	M	.	*
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Model Type

- 202Di - Rate totaliser
- 214Di - Batch controller

Mounting Option - not Ex relevant

- 1 Panel Mounting
- 2 Wall Mounting
- 4 Turbine Stem Attachment
- 6 Pipe Mounting

Power / Input / Output

- 0 Battery powered, No Output
- 3 DC powered, Battery Backup, Alarms
- 4 Loop powered, Alarms

- M ATEX / IECEX Certification

Enclosure

- Plastic
- A Aluminium
- S Stainless Steel

Example: 202Di.24M.A

Instrument type

*	.	*	*	M	.	*
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Model Type

- 220i Level monitor
- 250i Process monitor
- 202Ai Rate totaliser

Mounting Option - not Ex relevant

- 1 Panel Mounting
- 2 Wall Mounting
- 4 Turbine Stem Attachment
- 6 Pipe Mounting

Power / Input / Output

- 0 Loop powered

- M ATEX / IECEX Certification

Enclosure

- Plastic
- A Aluminium
- S Stainless Steel

Example: 220i.20M

15.2 Description

Reason for this issue

- Change of company address
- Update of documentation
- Update of parameters

Description of Product

The 200 Series instruments offer display, control, and alarm functions. Depending on the model, they accept either a frequency or 4-20 mA current input or digital input circuits.

- The Model 202Ai Rate-Totaliser is a microprocessor-based device designed to measure a 4-20 mA signal. It is powered directly by the 4-20 mA input signal and therefore requires no external power supply.
- The Model 202Di Rate-Totaliser is a microprocessor-based device that accepts frequency or pulse inputs from a wide range of flowmeters. It is available in three different versions:
 1. Battery-powered version (no external power required).
 2. DC-powered version with either high/low flow alarms or a low flow alarm and pulse output. A backup battery pack maintains operation if the DC power supply is interrupted.
 3. Loop-powered version with 4-20 mA signal processing and alarms, similar to the DC-powered version. This model is powered directly by the 4-20 mA loop and includes a battery backup for loop failures.
- The Model 214Di operates from an external power source (9-28 VDC). In case of a power failure, the built-in battery pack ensures continued operation.
- The Model 220i is fully powered by the 4-20 mA loop and does not require an external power source.
- The Model 250i is identical to the Model 220i, except for differences in software.

Listing of all components used referring to older standards

None

15.3 Parameters

15.3.1 Type 202Di.*0M.*, 202Di.*3M.* and 214Di.**M.*

15.3.1.1 Supply and Frequency / Pulse input circuit: terminals 8 (+) - 7 (-)

Maximum input voltage	U_i	DC	24	V
Maximum input current	I_i		20	mA
Maximum input power	P_i		320	mW
Maximum internal capacitance	C_i		2.4	nF
Maximum internal inductance	L_i			negligible

15.3.1.2 Supply and Frequency / Pulse output circuit: terminals 8 (+) - 7 (-)

Maximum output voltage	U_o	DC	5.36	V
Maximum output current	I_o		5.9	mA
Maximum output power	P_o		7.8	mW
Maximum external capacitance	C_o		1000	μ F
Maximum external inductance	L_o		100	mH

15.3.1.3 Supply and Signal circuit (4 - 20 mA Current loop): terminals 2 (+) - 1 (-)

Maximum input voltage	U_i	DC	28	V
Maximum input current	I_i		93	mA

Maximum input power	P_i		653	mW
Maximum internal capacitance	C_i		2.4	nF
Maximum internal inductance	L_i			negligible

15.3.1.4 Optocoupler-Isolated Supply and Digital Input Circuits:
terminals 4 (+) - 3 (-) and 6 (+) - 5 (-)

Maximum input voltage	U_i	DC	28	V
Maximum input current	I_i		93	mA
Maximum input power	P_i		490	mW
Maximum internal capacitance	C_i		2.4	nF
Maximum internal inductance	L_i			negligible

15.3.2 Type 202Ai.**M.*, 220i.**M.* und 250i.**M.*

15.3.2.1 Supply and Signal circuit (4 - 20 mA Current loop):
terminals 4 (+) - 3 (-)

Maximum input voltage	U_i	DC	28	V
Maximum input current	I_i		93	mA
Maximum input power	P_i		653	mW
Maximum internal capacitance	C_i		24	nF
Maximum internal inductance	L_i			negligible

15.3.2.2 Optocoupler-Isolated Supply and Digital Input Circuits:

Type 202Ai.**M.*:
terminals 6 (+) - 5 (-) and 8 (+) - 7 (-)

Types 220i.**M.*: und 250i.**M.*:
terminals 2 (+) - 1 (-), 6 (+) - 5 (-), 8 (+) - 7 (-) and 11 (+) - 10 (-)

Maximum input voltage	U_i	DC	28	V
Maximum input current	I_i		93	mA
Maximum input power	P_i		490	mW
Maximum internal capacitance	C_i		2.4	nF
Maximum internal inductance	L_i			negligible

15.3.3 Ambient temperature range T_a -20 °C to +60 °C

16 **Report Number**

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17 **Specific Conditions of Use**

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

18 **Essential Health and Safety Requirements**

Met by compliance with the requirements mentioned in item 9.

19 **Remarks and additional information**

Drawings and documents are listed in the confidential report.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA Testing and Certification GmbH
Bochum, 2025-04-29
BVS-Hil/MGR A 20240688 /



Managing Director