# **EU-Type Examination Certificate Supplement 3**

- Equipment intended for use in potentially explosive atmospheres Directive 2014/34/EU
- EU-Type Examination Certificate Number: BVS 15 ATEX E 106 X
- Product: Instrument type \*.\*\*M.\*
- Manufacturer: Contrec Ltd.

1

2

3

4

5

6

7

8

**DEKRA** 

- Address: Riverside, Canal Road, Sowerby Bridge, HX6 2AY, West Yorkshire, United Kingdom
- This supplementary certificate extends EU-Type Examination Certificate No. BVS 15 ATEX E 106 X to apply to products designed and constructed in accordance with the specification set out in the appendix of the said certificate but having any acceptable variations 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.

9 The Essential Health and Safety Requirements are assured in consideration of:

EN IEC 60079-0:2018 EN 60079-11:2012

#### General requirements Intrinsic Safety "i

- 10 If the sign "X" is placed after the certificate number, it indicates/that the product is subject to the Special Conditions for Use specified in the appendix 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 the product shall include the following:



DEKRA Testing and Certification GmbH Bochum, 2022-02-08

Signed: Jörg-Timm Kilisch

Managing Director



Page 1 of 5 of BVS 15 ATEX E 106 X / N3 – Jobnumber 342468600 This certificate may only be reproduced in its entirety and without any change.

### 13 Appendix

# 14 EU-Type Examination Certificate

BVS 15 ATEX E 106 X Supplement 3

15 **Product description** 

# 15.1 Subject and type

DEKRA A DEKRA A DEKRA A DEKRA

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

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

		Instrument type * . * *
Mode	е Туре	
202D	i - Rate totaliser	
214D	i - Batch controller	
Mour	nting Option - not Ex relevant	
1	Panel Mounting	
2	Wall Mounting	
4	Turbine Stem Attachment	
6	Pipe Mounting	
Powe	er / Input / Output	
0	Battery powered, No Output	
3	DC powered, Battery Backup, Alarms	
4	Loop powered, Alarms	
М	ATEX / IECEX Certification	
Enclo	osure ////////////////////////////////////	
-	Plastic	///////////////////////////////////////
А	Aluminium/////////////////////////////////	
		///////////////////////////////////////
S xamp	Ie: 202Di.24M.A	Instrument type //*//. [*//*/
S xamp Mode 220i	el Type	Instrument type
<u>S</u> xamp <b>Mode</b> 220i 250i 2024	el Type Level monitor Process monitor	Instrument type
S xamp 220i 250i 202A	el Type Level monitor Process monitor i Rate totaliser	Instrument type
S xamp 220i 250i 202A Mour 1	el Type Level monitor Process monitor i Rate totaliser Diting Option - not Ex relevant Panel Mounting	Instrument type
S xamp 220i 250i 202A Mour 1 2	el Type Level monitor Process monitor i Rate totaliser hting Option - not Ex relevant Panel Mounting Wall Mounting	Instrument type
<u>S</u> xamp 220i 250i 202A <b>Mour</b> 1 2 4	el Type Level monitor Process monitor i Rate totaliser hting Option - not Ex relevant Panel Mounting Wall Mounting Turbine Stem Attachment	Instrument type
<u>S</u> xamp 220i 250i 202A <b>Mour</b> 1 2 4 6	el Type Level monitor Process monitor i Rate totaliser Ting Option - not Ex relevant Panel Mounting Wall Mounting Turbine Stem Attachment Pipe Mounting	Instrument type
S xamp 220i 250i 202A Mour 1 2 4 6 <b>Powe</b>	el Type Level monitor Process monitor i Rate totaliser Ting Option - not Ex relevant Panel Mounting Wall Mounting Turbine Stem Attachment Pipe Mounting er / Input / Output	Instrument type
S xamp 220i 250i 202A Mour 1 2 4 6 Powe 0	el Type Level monitor Process monitor i Rate totaliser Ting Option - not Ex relevant Panel Mounting Wall Mounting Turbine Stem Attachment Pipe Mounting er / Input / Output Loop powered	Instrument type
S xamp 220i 250i 202A Mour 1 2 4 6 Powe 0 M	el Type Level monitor Process monitor i Rate totaliser Ting Option - not Ex relevant Panel Mounting Wall Mounting Turbine Stem Attachment Pipe Mounting er / Input / Output Loop powered ATEX / IECEX Certification	
S xamp 220i 250i 202A Mour 1 2 4 6 Powe 0 M Enclo	el Type Level monitor Process monitor i Rate totaliser Ting Option - not Ex relevant Panel Mounting Wall Mounting Turbine Stem Attachment Pipe Mounting er / Input / Output Loop powered ATEX / IECEX Certification	
S xamp 220i 250i 202A Mour 1 2 4 6 Powe 0 M Enclo	el Type Level monitor Process monitor i Rate totaliser Ting Option - not Ex relevant Panel Mounting Wall Mounting Turbine Stem Attachment Pipe Mounting er / Input / Output Loop powered ATEX / IECEX Certification	
S xamp 220i 250i 202A Mour 1 2 4 6 Powe 0 M Enclo - A	el Type Level monitor Process monitor i Rate totaliser Ting Option - not Ex relevant Panel Mounting Wall Mounting Turbine Stem Attachment Pipe Mounting er / Input / Output Loop powered ATEX / IECEX Certification Disure Plastic Aluminium	

DAKKS Deutsche Akkreditierungsstell D-ZE-17438-02-00 Page 2 of 5 of BVS 15 ATEX E 106 X / N3 – Jobnumber 342468600 This certificate may only be reproduced in its entirety and without any change.

#### 15.2 Description

## Reason for the supplement:

- 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 16.10.2020).

# **Description of Product**

The instruments of the range 200 Series provide display, control and alarm functions. Depending on the model, the apparatus has 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.
- 3. 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 Model 214Di will operate from an external power source between/9-28 VDC. A battery pack 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

#### 15.3 **Parameters**

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

15.3.1.1.	Supply and frequency/input circuit terminals/7 –/8							
	Only for connection of an intrinsically safe circuit with the following maximum values:							
	Max input voltage	///////////////////////////////////////	//DC///	//24////	//////////////////////////////////////			
	Max input current	///////////////////////////////////////	///////	//20////	///mA/			
	Max input power	//////////////////////////////////////	///////	/320////	///mW/			
	Effective internal capacitance	////////Ci////////////////////////////	////////	/20////	/////nF//			
	Effective internal inductance	//////////////////////////////////////	negligible		///////////////////////////////////////			
	Or for connection of a passive circuit		///////	///////////////////////////////////////				
	Max output voltage	/U <sub>o</sub> ///	DC	10///	///////////////////////////////////////			
	Max output current	//////////////////////////////////////		///9////	mA			
	Max output power	////////Po/////		///23////	mW			
	Max external capacitance	///////Co/////		20	///// μF			
	Max external inductance	Lo	///////////////////////////////////////	1.5	//// н			
15.3.1.2	Supply and analogue output circuit (terminals $1 - 2$ ) and digital output circuits (terminals $3 - 4$ and $5 - 6$ ) Only for connection of an intrinsically safe circuit with the following maximum values:							
	Max input voltage	Ui////////////////////////////////////	DC	28	V			
	Max input current	//////////////////////////////////////		93	mA			
	Max input power	//////////////////////////////////////		653	mW			
	Effective internal capacitance	Ci		100	nF			
	Effective internal inductance	Li//////	neg	ligible				
	Dage 2 of 5 of DVC 15	ATEVE 100 V / NO Johnumber 240	100000					

Page 3 of 5 of BVS 15 ATEX E 106 X / N3 – Jobnumber 342468600 This certificate may only be reproduced in its entirety and without any change.



DEKRA Testing and Certification GmbH, Handwerkstr. 15, 70565 Stuttgart, Germany Certification body: Dinnendahlstr. 9, 44809 Bochum, Germany Phone +49.234.3696-400, Fax +49.234.3696-401, e-mail DTC-Certification-body@dekra.com

15.3.2	Type 202Di.*4M.*							
15.3.2.1	Supply and frequency input circuit termin Only for connection of an intrinsically saf Max input voltage Max input current Max input power Effective internal capacitance Effective internal inductance	nals 7 – 8 fe circuit with the follow U <sub>i</sub> I <sub>i</sub> Pi Ci Li	ving maximum values: DC 24 20 320 20 negligible	V mA mW nF				
	Or for connection of a passive circuit							
	Max output voltage Max output current Max output power Max external capacitance Max external inductance	Uo Io Po Co Lo	DC 10 9 23 20 1.5	V mA mW µF H				
15.3.2.2	Supply and analogue input circuit terminals 1 – 2							
	Only for connection of an intrinsically saf Max input voltage Max input current Max input power Effective internal capacitance Effective internal inductance	fe circuit with the follow Ui Ii Pi Ci	ring maximum values: DC 28 93 653 2 negligible	V mA mW nF				
15.3.2.3	Digital output circuit terminals 3 – 4 and Only for connection of an intrinsically saf Max input voltage Max input current Max input power Effective internal capacitance Effective internal inductance	5-6 ie circuit with the follow $U_i$ $I_i$ $P_i$ $O_i$ $L_i$	ing maximum values: DC 28 93 653 100 negligible	V mA mW nF				
15.3.3	Type 202Ai.**M, 220i.**M und 250i.**M			///////////////////////////////////////				
15.3.3.1	Supply and analogue input circuit termin Only for connection of an intrinsically saf Max input voltage Max input current Max input power Effective internal capacitance Effective internal inductance	als 3-4 fe circuit with the follow Ui Ii Pi Ci Li	ning/maximum/values: DC 28 93 653 20 negligible	V mA mW nF				
15.3.3.2	5.3.3.2 Digital output circuit Type 202Ai: Terminals 5 – 6 and 7 – 8 Types 220i and 250i: Terminals 1 – 2, 5 – 6, 7 – 8 and 10 – 11 Only for connection of an intrinsically safe circuit with the following maximum values: Maximum input voltage Maximum input current Maximum input current Maximum input power Effective internal capacitance Effective internal inductance Li negligible							
15.3.4	Ambient temperature range	/////Та////	-20 °C to +60 °C					
16	Report Number							

BVS PP 15.2187 EU, as of 2022-02-08

DAKKS Deutsche Akkreditierungsstelle D-ZE-17438-02-00

A DEKRA A DIEKRA EKRA DE EKRA DE

Page 4 of 5 of BVS 15 ATEX E 106 X / N3 – Jobnumber 342468600 This certificate may only be reproduced in its entirety and without any change.

#### 17 Special Conditions for 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

The Essential Health and Safety Requirements are covered by the standards listed under item 9.

## 19 Drawings and Documents

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, 2022-02-08 BVS-Bo/Mu A20211131

Managing Director



Page 5 of 5 of BVS 15 ATEX E 106 X / N3 – Jobnumber 342468600 This certificate may only be reproduced in its entirety and without any change.