

Translation

# EU-Type Examination Certificate Supplement 3

Change to Directive 2014/34/EU

- 2 **Equipment intended for use in potentially explosive atmospheres**  
**Directive 2014/34/EU**
- 3 EU-Type Examination Certificate Number: **BVS 10 ATEX E 113 X**
- 4 Product: **DIN Rail Trenner type D5\*\*\*\*, D5\*\*\*\*-xxx**
- 5 Manufacturer: **G.M. International S.R.L.**
- 6 Address: **Via Mameli 53/55, 20852 Villasanta (MB), Italy**

7 This supplementary certificate extends EC-Type Examination Certificate No. BVS 10 ATEX E 113 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.

8 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 10.2216 EU.

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

<b>EN IEC 60079-0:2018</b>	<b>General requirements</b>
<b>EN IEC 60079-7:2015 + A1:2018</b>	<b>Increased Safety "e"</b>
<b>EN 60079-11:2012</b>	<b>Intrinsic safety "i"</b>
<b>EN IEC 60079-15:2019</b>	<b>Type of protection "n"</b>

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:

 **II 3(1)G Ex ec [ia Ga] IIC T4 Gc**  
**II 3(1)G Ex ec nC [ia Ga] IIC T4 Gc**  
**I (M1) [Ex ia Ma] I**  
**II (1)D [Ex ia Da] IIIC**

DEKRA Testing and Certification GmbH  
Bochum, 2022-04-12

Signed: Jörg-Timm Kilisch

Managing Director



13 **Appendix**

14 **EU-Type Examination Certificate**

**BVS 10 ATEX E 113 X  
Supplement 3**

15 **Product description**

15.1 **Subject and type**

DIN Rail Isolators type series D5\*\*\*\*, D5\*\*\*\*-xxx comprising the following models:

Repeater Power Supply	type	D5011*, D5011*-xxx
Repeater Power Supply	type	D5014*, D5014*-xxx

Powered Isolating Driver	type	D5020*, D5020*-xxx
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Switch/Proximity Detector Repeater	type	D5030*, D5030*-xxx
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Switch/Proximity Detector Repeater	type	D5031*, D5031*-xxx
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Switch/Proximity Detector Repeater	type	D5032*, D5032*-xxx
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Switch/Proximity Interface	type	D5034*, D5034*-xxx
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Switch/Proximity Detector Repeater	type	D5036* / type D5036*-xxx,
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Switch/Proximity Detector Repeater	type	D5037* / type D5037*-xxx
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Digital Output Driver	type	D5048S, D5048S-xxx, D5049S, D5049S-xxx
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In the full designation the “\*” is replaced by letters marking details of construction as follows:

S	= single channel	S-xxx	= single channel
D	= dual channel	D-xxx	= dual channel

(Option 'xxx' = non Ex -relevant details of function)

15.2 **Description**

With this supplement the certificate is changed to Directive 2014/34/EU.

(Annotation: 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. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.)

The DIN Rail Isolators of type series D5\*\*\*\*, D5\*\*\*\*-xxx are designed as electrical apparatus, suitable for applications requiring a defined SIL level (according to EN 61508) in safety related systems for high risk industries.

Compliance with EN 61508 is not subject to this EC-Type Examination Certificate.

DIN Rail Isolators of D5\*\*\*\*, D5\*\*\*\*-xxx series are designed as associated apparatus and designated for installation in the safe area or alternatively in areas requiring EPL Gc equipment. Electronic components of DIN Rail Isolators are arranged on printed-circuit-boards (PCB) packaged in plastic enclosures suitable for installation on T35 DIN Rails.

DIN Rail Isolators of D5\*\*\*\*, D5\*\*\*\*-xxx series provide safe galvanic separation between intrinsically safe circuits and non-intrinsically safe signal circuits / non intrinsically safe power supply on the PCB up to a sum of peak values of rated voltages of 375 V.

**Repeater Power Supply type D5011S, D5011S-xxx, D5011D, D5011D-xxx**

Repeater Power Supply Type D5011\*, D5011\*-xxx provides a fully floating single or dual channel intrinsically safe DC supply for energizing conventional 2 wires 4 - 20 mA transmitters located in hazardous areas, and repeats the current in floating circuit to drive a safe area load.

Available versions of the Repeater Power Supply: single channel: type D5011S, D5011S-xxx; dual channel: type D5011D, D5011D-xxx.

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**Repeater Power Supply type D5014S, D5014S-xxx, D5014D, D5014D-xxx**

Repeater Power Supply type D5014\*, D5014\*-xxx provides a fully floating single or dual channel DC supply for energizing conventional 2/3 wires 0/4-20 mA, active or passive, transmitters located in hazardous areas, and repeats the current in floating circuit to drive a safe area load. Available versions of the Repeater Power Supply: single channel: type D5014S, D5014S-xxx; dual channel: type D5014D, D5014D-xxx.

**Powered Isolating Driver type D5020S, D5020S-xxx, D5020D, D5020D-xxx**

Isolating Driver Type D5020\*, D5020\*-xxx provides single or dual channel intrinsically safe power supply for valve positioners or I/P-converters and repeat a non-intrinsically safe 4 - 20 mA analogue signal from a controller located in a safe area to a load up to 700 Ω. Available versions of the Powered Isolating Driver: single channel: type D5020S, D5020S-xxx; dual channel: type D5020D, D5020D-xxx.

**Switch/Proximity Detector Repeater type D5030S, D5030S-xxx, D5030D, D5030D-xxx**

The single and dual channel Switch/Proximity Detector Repeater D5030\*, D5030\*-xxx is a device that can be configured for a switch or proximity detector (EN 60947-5-6, NAMUR), NO or NC and for NE or ND SPST (D5030D, D5030D-xxx) or SPDT (D5030S, D5030S-xxx) relay output contact. Each channel enables a safe area load to be controlled by a switch, or a proximity detector, located in a hazardous area.

Available versions of the Switch/Proximity Detector Repeater: single channel: type D5030S, D5030S-xxx. dual channel: type D5030D, D5030D-xxx..

**Switch/Proximity Detector Repeater type D5031S, D5031S-xxx, D5031D, D5031D-xxx**

The single and dual channel Switch/Proximity Detector Repeater D5031\*, D5031\*-xxx is a device that can be configured for a switch or proximity detector (EN60947-5-6, NAMUR). NO or NC and for NO or NC optocoupled open collector transistor output. Each channel enables a safe area load to be controlled by a switch, or a proximity detector, located in a hazardous area.

Available versions of the Switch/Proximity Detector Repeater: single channel: type D5031S, D5031S-xxx. dual channel: type D5031D, D5031D-xxx.

**Switch/Proximity Detector Repeater type D5032S, D5032S-xxx, D5032D, D5032D-xxx**

The single and dual channel Switch/Proximity Detector Repeater D5032\*, D5032\*-xxx is a device that can be configured for a switch or proximity detector (EN60947-5-6, NAMUR). NO or NC and for NE or ND SPST (D5032D, D5032D-xxx) or SPDT (D5032S, D5032S-xxx) relay output contact. Each channel enables a safe area load to be controlled by a switch, or a proximity detector, located in a hazardous area.

Available versions of the Switch/Proximity Detector Repeater: single channel: type D5032S, D5032S-xxx. dual channel: type D5032D, D5032D-xxx.

**Switch/Proximity Interface type D5034S, D5034S-xxx, D5034D, D5034D-xxx**

Switch/Proximity Interface types D5034\*, D5034\*-xxx provides single or dual channel intrinsically safe power supply for switch / proximity switch circuits and repeat the status of contacts or proximity switches in non-intrinsically safe output circuits.

Available versions of the Switch/Proximity Interface: single channel: type D5034S, D5034S-xxx. dual channel: type D5034D, D5034D-xxx.

**Switch/Proximity Detector Repeater type D5036S, D5036S-xxx, D5036D, D5036D-xxx**

The single and dual channel Switch/Proximity Detector Repeater D5036\*, D5036\*-xxx generates fully floating intrinsically safe power supply for proximity sensor field devices or for voltage free contacts of field devices and repeats the operation status of the proximity sensors / voltage free contacts on the non-intrinsically safe side by means of voltage free relay contacts.

Each channel enables a safe area load to be controlled by a switch, or a proximity detector, located in a hazardous area.

The Switch/Proximity Detector Repeater D5036\*, D5036\*-xxx is designed for installation on T35 DIN Rail only.

**Switch/Proximity Detector Repeater type D5037S, D5037S-xxx, D5037D, D5037D-xxx**

The single and dual channel Switch/Proximity Detector Repeater D5037\*, D5037\*-xxx generates fully floating intrinsically safe power supply for proximity sensor field devices or for voltage free contacts of field devices and repeats the operation status of the proximity sensors / voltage free contacts on the non-intrinsically safe side by means of voltage free opto-isolator outputs.

Each channel enables a safe area load to be controlled by a switch, or a proximity detector, located in a hazardous area.

The Switch/Proximity Detector Repeater D5037\*, D5037\*-xxx is designed for installation on T35 DIN Rail or on Termination Board.

**Digital Output type D5048S, D5048S-xxx, D5049S, D5049S-xxx**

Digital Output Type D504\*S, D504\*S-xxx provides single channel intrinsically safe remote outputs to operate solenoid valves, LEDs or audible alarms driven by non-intrinsically safe digital remote signals. The versions type D5048S, D5048S-xxx, type D5049S, D5049S-xxx provide different electrical parameters.

**Short cut explanation**

NO = Normal Open

NC = Normal Closed

NE = Normal Energized

ND = Normal De-energized

SPST = Single-Pole Single-Throw

SPDT = Single-Pole Double-Throw

**Reason for the supplement:**

- Update to Directive 2014/34/EU
- Update of the standards statuses
  - o EN 60079-0:2012 + A11:2013 to EN IEC 60079-0:2018
  - o EN 60079-15:2010 to EN IEC 60079-15:2019
- Update of the type of protection "nA" to "ec"

### 15.3 Parameters

#### 15.3.1 Non intrinsically safe circuits

##### 15.3.1.1 Power supply

DIN Rail Isolator version	Voltage		Power
	U <sub>n</sub>	U <sub>m</sub>	P <sub>n</sub>
	DC [V]	AC [V]	[W]
D5011S, D5011S-xxx	24	250	≤ 1.35
D5011D, D5011D-xxx			≤ 2.90
D5014S, D5014S-xxx,			≤ 1.35
D5014D, D5014D-xxx			≤ 2.70
D5020S, D5020S-xxx,			≤ 1.00
D5020D, D5020D-xxx			≤ 2.00
D5030S, D5030S-xxx			≤ 0.50
D5030D, D5030D-xxx			≤ 1.00
D5031S, D5031S-xxx			≤ 0.35
D5031D, D5031D-xxx			≤ 0.70
D5032S, D5032S-xxx			≤ 0.50
D5032D, D5032D-xxx			≤ 1.00
D5034S, D5034S-xxx,			≤ 0.40
D5034D, D5034D-xxx			≤ 0.80
D5036S, D5036S-xxx			≤ 0,5
D5036D, D5036D-xxx			≤ 1
D5037S, D5037S-xxx			≤ 0,35
D5037D, D5037D-xxx			≤ 0,7
D5048S, D5048S-xxx			≤ 1.80
D5049S, D5049S-xxx			≤ 1.80

##### 15.3.1.2 Input / output signal circuits (General, refers to devices providing IS circuits)

Voltage U<sub>m</sub> = AC 253 V

- 15.3.2 Intrinsically safe circuits level of protection Ex ia IIC / IIB / IIA / I
- 15.3.2.1 Repeater Power Supply type D5\*\*\*\* / D5\*\*\*\*-xxx
- 15.3.2.1.1 Repeater Power Supply type D5011\*, D5011\*-xxx  
Device marking: Ex ec [ia Ga] IIC T4 Gc, [Ex ia Da] IIIC, [Ex ia Ma] I

Single channel parameters	Terminals	
Channel	1	7-8 ) <sup>1</sup>
	2	9-10 ) <sup>1</sup>
Voltage U <sub>o</sub>	DC 25.9 V	
Current I <sub>o</sub>	92 mA	
Power P <sub>o</sub>	594 mW	
Voltage U <sub>i</sub>	N/A	
Current I <sub>i</sub>	N/A	
Power P <sub>i</sub>	N/A	
Effective internal capacitance C <sub>i</sub>	N/A	
Effective internal inductance L <sub>i</sub>	N/A	
Max. external capacitance C <sub>o</sub>	IIC	100 nF
	IIB, IIIC	770 nF
	IIA	2.63 µF
	I	4.02 µF
Max. external inductance L <sub>o</sub>	IIC	4.2 mH
	IIB, IIIC	16.8 mH
	IIA	33.7 mH
	I	55.2 mH
Max. inductance / resistance ratio L <sub>o</sub> /R <sub>o</sub>	IIC	59.9 µH/Ω
	IIB, IIIC	239.7 µH/Ω
	IIA	479.4 µH/Ω
	I	786.6 µH/Ω
Characteristics	linear	
Remarks:		
) <sup>1</sup> 2-wire circuit "T*+", "T*-"; parameters of supply circuit		

15.3.2.1.2 Repeater Power Supply type D5014\*, D5014\*-xxx  
 Device marking: Ex ec [ia Ga] IIC T4 Gc, [Ex ia Da] IIIC, [Ex ia Ma] I

Single channel parameters	Terminals			
	1	7-8 ) <sup>1</sup>	7-11 ) <sup>3</sup>	8-11 ) <sup>2</sup>
Channel	2	9-10 ) <sup>1</sup>	9-12 ) <sup>3</sup>	10-12 ) <sup>2</sup>
Voltage U <sub>o</sub>		DC 25.9 V		DC +/- 1.1 V
Current I <sub>o</sub>		92 mA		56 mA
Power P <sub>o</sub>		594 mW		16 mW
Voltage U <sub>i</sub>		N/A		DC 30 V
Current I <sub>i</sub>		N/A		128 mA
Power P <sub>i</sub>		N/A		N/A
Effective internal capacitance C <sub>i</sub>		N/A		0 nF
Effective internal inductance L <sub>i</sub>		N/A		0 mH
Max. external capacitance C <sub>o</sub>	IIC	100 nF		100 µF
	IIB, IIIC	770 nF		1000 µF
	IIA	2.63 µF		1000 µF
	I	4.02 µF		1000 µF
Max. external inductance L <sub>o</sub>	IIC	4.2 mH		11.5 mH
	IIB, IIIC	16.8 mH		46.0 mH
	IIA	33.7 mH		92.1 mH
	I	55.2 mH		151.1 mH
Max. inductance / resistance ratio L <sub>o</sub> /R <sub>o</sub>	IIC	59.9 µH/Ω		2327.2 µH/Ω
	IIB, IIIC	239.7 µH/Ω		9309.0 µH/Ω
	IIA	479.4 µH/Ω		18618.1 µH/Ω
	I	786.6 µH/Ω		30545.4 µH/Ω
Characteristics		linear		linear
Remarks:				
) <sup>1</sup> 2-wire circuit "T*+", "T*-"; parameters of supply circuit				
) <sup>2</sup> 2-wire circuit "-I*+", "I*-"; parameters of input circuit				
) <sup>3</sup> 3-wire circuit "T*+", "I*+", "I*-"; not used				

15.3.2.2 Powered Isolating Driver type D5\*\*\*\* / D5\*\*\*\*-xxx

15.3.2.2.1 Powered Isolating Driver type D5020\*, D5020\*-xxx

Device marking: Ex ec [ia Ga] IIC T4 Gc, [Ex ia Da] IIIC, [Ex ia Ma] I

Single channel parameters	Terminals	
Channel	1	7-8 ) <sup>1</sup>
	2	9-10 ) <sup>1</sup>
Voltage U <sub>o</sub>	DC 25.9 V	
Current I <sub>o</sub>	93 mA	
Power P <sub>o</sub>	595 mW	
Voltage U <sub>i</sub>	N/A	
Current I <sub>i</sub>	N/A	
Power P <sub>i</sub>	N/A	
Effective internal capacitance C <sub>i</sub>	N/A	
Effective internal inductance L <sub>i</sub>	N/A	
Max. external capacitance C <sub>o</sub>	IIC	100 nF
	IIB, IIIC	770 nF
	IIA	2.63 μF
	I	4.02 μF
Max. external inductance L <sub>o</sub>	IIC	4.1 mH
	IIB, IIIC	16.7 mH
	IIA	33.5 mH
	I	54.9 mH
Max. inductance / resistance ratio L <sub>o</sub> /R <sub>o</sub>	IIC	59.7 μH/Ω
	IIB, IIIC	239.0 μH/Ω
	IIA	478.1 μH/Ω
	I	784.5 μH/Ω
Characteristics	linear	
Remarks: ) <sup>1</sup> 2-wire circuit "O*+", "O*-"; parameters of supply circuit		





15.3.2.3 Switch/Proximity Detector Repeater / Switch/Proximity Interface D5\*\*\*\* / D5\*\*\*\*-xxx

15.3.2.3.1 Switch/Proximity Detector Repeater type D5030\*, D5030\*-xxx  
Device marking: Ex ec nC [ia Ga] IIC T4 Gc, [Ex ia Da] IIIC, [Ex ia Ma] I

15.3.2.3.2 Switch/Proximity Detector Repeater type D5031\*, D5031\*-xxx  
Device marking: Ex ec [ia Ga] IIC T4 Gc, [Ex ia Da] IIIC, [Ex ia Ma] I

15.3.2.3.3 Switch/Proximity Detector Repeater type D5032\*, D5032\*-xxx  
Device marking: Ex ec nC [ia Ga] IIC T4 Gc, [Ex ia Da] IIIC, [Ex ia Ma] I

Single channel parameters	Device	D5030* D5031* D5032*
	Terminals	
Channel	1	7-8 ) <sup>1</sup>
	2	9-10 ) <sup>1</sup>
Voltage U <sub>o</sub>	DC10.5 V	
Current I <sub>o</sub>	22 mA	
Power P <sub>o</sub>	56 mW	
Voltage U <sub>i</sub>	N/A	
Current I <sub>i</sub>	N/A	
Power P <sub>i</sub>	N/A	
Effective internal capacitance C <sub>i</sub>	1.1 nF	
Effective internal inductance L <sub>i</sub>	N/A	
Max. external capacitance C <sub>o</sub>	IIC	2.41 μF
	IIB, IIIC	16.8 nF
	IIA	75 μF
	I	66 μF
Max. external inductance L <sub>o</sub>	IIC	78.3 mH
	IIB, IIIC	313.4 mH
	IIA	626.9 mH
	I	1028.6 mH
Max. inductance / resistance ratio L <sub>o</sub> /R <sub>o</sub>	IIC	635.9 μH/Ω
	IIB, IIIC	2543.9 μH/Ω
	IIA	5087.9 μH/Ω
	I	8347.4 μH/Ω
Characteristics	linear	
Remarks:	) <sup>1</sup> 2-wire circuit "I*+", "I*- " parameters of supply circuit	

15.3.2.3.4 Switch/Proximity Interface type D5034\*, D5034\*-xxx  
 Device marking: Ex ec [ia Ga] IIC T4 Gc, [Ex ia Da] IIIC, [Ex ia Ma] I

Single channel parameters	Device	D5034*	D5036*	D5037*
	Terminals			
Channel	1	7-8 ) <sup>1</sup>		
	2	9-10 ) <sup>1</sup>		
Voltage U <sub>o</sub>	DC10.5 V			
Current I <sub>o</sub>		15 mA	22 mA	22 mA
Power P <sub>o</sub>		39 mW	56 mW	56 mW
Voltage U <sub>i</sub>	N/A			
Current I <sub>i</sub>	N/A			
Power P <sub>i</sub>	N/A			
Effective internal capacitance C <sub>i</sub>		N/A	1.1 nF	1.1 nF
Effective internal inductance L <sub>i</sub>	N/A			
Max. external capacitance C <sub>o</sub>	IIC	2.41 μF		
	IIB, IIIC	16.8 nF		
	IIA	75 μF		
	I	66 μF		
Max. external inductance L <sub>o</sub>	IIC	163.2 mH	78.3 mH	
	IIB, IIIC	652.8 mH	313.4 mH	
	IIA	1305.6 mH	626.9 mH	
	I	2142.0 mH	1028.6 mH	
Max. inductance / resistance ratio L <sub>o</sub> /R <sub>o</sub>	IIC	918.2 μH/Ω	635.9 μH/Ω	
	IIB, IIIC	3672.9 μH/Ω	2543.9 μH/Ω	
	IIA	7345.8 μH/Ω	5087.9 μH/Ω	
	I	12051.8 μH/Ω	8347.4 μH/Ω	
Characteristics	linear			
Remarks: ) <sup>1</sup> 2-wire circuit "T*+", "T*-" parameters of supply circuit				



15.3.2.4 Digital Output Driver type D5\*\*\*\* / D5\*\*\*\*-xxx

15.3.2.4.1 Digital Output Driver type D5048S, D5048S-xxx

Device marking: Ex ec [ia Ga] IIC T4 Gc, [Ex ia Da] IIIC, [Ex ia Ma] I

15.3.2.4.2 Digital Output Driver type D5049S, D5049S-xxx

Device marking: Ex ec [ia Ga] IIC T4 Gc, [Ex ia Da] IIIC, [Ex ia Ma] I

Single channel parameters	Terminals			
Channel	1	7-10 ) <sup>1</sup>	8-10 ) <sup>2</sup>	9-10 ) <sup>3</sup>
	2	N/A	N/A	N/A
Voltage U <sub>o</sub>		DC 24.8 V	DC 24.8 V	DC 24.8 V
Current I <sub>o</sub>		147 mA	108 mA	93 mA
Power P <sub>o</sub>		907 mW	667 mW	571 mW
Voltage U <sub>i</sub>		N/A	N/A	N/A
Current I <sub>i</sub>		N/A	N/A	N/A
Power P <sub>i</sub>		N/A	N/A	N/A
Effective internal capacitance C <sub>i</sub>		N/A	N/A	N/A
Effective internal inductance L <sub>i</sub>		N/A	N/A	N/A
Max. external capacitance C <sub>o</sub>	IIC	113 nF	113 nF	113 nF
	IIB, IIIC	860 nF	860 nF	860 nF
	IIA	3.05 μF	3.05 μF	3.05 μF
	I	4.35 μF	4.35 μF	4.35 μF
L <sub>o</sub> - Max. external inductance L <sub>o</sub>	IIC	1.65 mH	3.07 mH	4.19 mH
	IIB, IIIC	6.63 mH	12.30 mH	16.79 mH
	IIA	13.27 mH	24.60 mH	33.58 mH
	I	21.78 mH	40.36 mH	55.09 mH
Max. inductance / resistance ratio L <sub>o</sub> /R <sub>o</sub>	IIC	39.2 μH/Ω	53.3 μH/Ω	62.3 μH/Ω
	IIB, IIIC	156.8 μH/Ω	213.5 μH/Ω	249.4 μH/Ω
	IIA	313.6 μH/Ω	427.0 μH/Ω	498.9 μH/Ω
	I	514.6 μH/Ω	700.6 μH/Ω	818.5 μH/Ω
Characteristics		linear		
Anmerkungen - Remarks: ) <sup>1</sup> 2-wire circuit 'Out A' "O1+", "O-"; parameters of supply circuit ) <sup>2</sup> 2-wire circuit 'Out B' "O2+", "O-"; parameters of supply circuit ) <sup>3</sup> 2-wire circuit 'Out C' "O3+", "O-"; parameters of supply circuit "O-" = common ground for "O*+" 'Out A / B / C' are used exclusive-or only				

15.3.3 Ambient temperature range

-40 °C ≤ Ta ≤ +70 °C

16 **Report Number**

BVS PP 10.2216 EU, as of 2022-04-12

17 **Special Conditions for Use**

17.1 Group I application

DIN Rail Isolators of type series D5\*\*\*\*, D5\*\*\*\*-xxx shall be installed outside the hazardous area or alternatively in an enclosure providing a suitable type of protection according to separate certification.

For Group I application interconnection of DIN Rail Isolators of type series D5\*\*\*\*, D5\*\*\*\*-xxx with other electrical apparatus to an intrinsically safe electrical system shall be assessed in a System Certificate, if required in local installation rules.

17.2 Group II application (Gas):

DIN Rail Isolators of type series D5\*\*\*\*, D5\*\*\*\*-xxx shall be installed:

- outside the hazardous area, or

- in case of alternative installation in areas requiring EPL Gc equipment:

- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.

and

- The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP 54 in accordance with EN IEC 60079-0.

17.3 Group III application (Dust):

DIN Rail Isolators of type series D5\*\*\*\*, D5\*\*\*\*-xxx shall be installed outside the hazardous area or alternatively in an enclosure providing a suitable type of protection according to separate certification.

17.4 General

The installation of DIN Rail Isolators of type series D5\*\*\*\*, D5\*\*\*\*-xxx shall be carried out in such a way that the clearances of un-insulated conductors of intrinsically safe circuits to grounded metal parts of the enclosure are at least 3 mm, and un-insulated conductors of non-intrinsically safe circuits of other apparatus are situated at least 50 mm from terminals for external intrinsically safe circuits, or are separated from them by an insulating barrier according to clause 6.2.1 of EN 60079-11:2012.

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.

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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, 2022-04-12  
BVS-Ret/MGR A20210555



Managing Director