

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 16 ATEX E 109 X** Issue: **01**

Equipment: **Digital Relay Output Driver type D5244*, D5244*-xxx**

Manufacturer: **G.M. International S.R.L.**

Address: **Via Mameli 53/55, 20852 Villasanta (MB), Italy**

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 16.2180 EU. This issue of the EU-Type Examination Certificate replaces the previous issue of the EU-Type Examination Certificate BVS 16 ATEX E 109 X.

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

EN IEC 60079-0:2018	General requirements
EN IEC 60079-7:2015 + A1:2018	Increased Safety "e"
EN 60079-11:2012	Intrinsic Safety "i"
EN IEC 60079-15:2019	Type of Protection "n"

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 to 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 (marking is provided in the Schedule as a part of item 15, if applicable):


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

DEKRA Testing and Certification GmbH
Bochum, 2022-09-01

Signed: Dr. Rolf Krökel

Managing Director

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

15.1 **Subject and type**

Digital Relay Output Driver type D5244*, D5244*-xxx

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**

The Digital Relay Output Drivers type D5244* / D5244*-xxx are associated apparatus designed as single or dual channel galvanic isolators, used to interface intrinsically safe field devices located in potentially explosive atmospheres with non-intrinsically safe measuring and process control equipment located in the safe area.

The Digital Relay Output Drivers are packaged in a plastic enclosure suitable for installation on a T35 DIN Rail or on a Termination Board provided with customer dedicated connection and located in the safe area or optionally in areas requiring EPL Gc equipment.

Electrical connections are accommodated by plug-in removable terminal block or with customer dedicated connector when installed on Termination Board.

The SPDT relay contact(s) of Digital Relay Output Drivers provide safe galvanic separated from non-IS driver circuit(s).

Reason for this issue

- Updating of the standards
 - o EN 60079-0
 - o EN 60079-15
- Change of ignition protection type "nA" to "ec"

15.3 **Parameters**

15.3.1 **Power supply circuit**

Digital Relais Output Driver type	Voltage	Power consumption
	U_n	P_n
	DC/AC [V]	[W]
D5244S, D5244S-xxx,	DC 24 V	≤ 0.6
D5244D, D5244D-xxx	(18...30 V)	≤ 1.2

15.3.2 Relay contact circuit intended to be connected to an intrinsically safe circuit, level of protection Ex ia IIC / IIB / IIA or Ex ib IIC / IIB / IIA

Single channel Parameters	Digital Relay Output Driver type	
	D5244S, D5244S*-xxx	D5244D, D5244D-xxx
Number of channels	1	2
Voltage U_o	N/A	N/A
Current I_o	N/A	N/A
Power P_o	N/A	N/A
Voltage U_i	DC 40 V / AC 40 V _s	DC 40 V / AC 40 V _s
Current I_i	2 A	2 A
Power P_i	-	-
Effective internal capacitance C_i	0 nF	0 nF
Effective internal inductance L_i	0 μH	0 μH
Remark: N/A = not applicable		

15.3.3 Ambient temperature range $-40\text{ °C} \leq T_a \leq +70\text{ °C}$

16 **Report Number**

BVS PP 16.2180 EU, as of 2022-09-01

17 **Specific Conditions of Use**

17.1 Group I application:

The Digital Relay Output Drivers type D5244* / D5244*-xxx shall be installed outside the hazardous area, or alternatively in an enclosure providing a suitable type of protection according to separate certification.

17.2 Group II application (Gas):

The Digital Relay Output Drivers type D5244* / D5244*-xxx shall be installed:

- outside the hazardous area, or
- in case of alternative installation in areas requiring EPL Gc equipment
 - o used in an area with a pollution degree of at least 2 according to EN 60664-1, and
 - o be installed in an enclosure with a degree of protection of at least IP54 in accordance with EN 60079-0.

17.3 Group III application (Dust):

The Digital Relay Output Drivers type D5244* / D5244*-xxx shall be installed outside the hazardous area, or shall be mounted in a suitable enclosure in case of alternative installation in areas requiring EPL Dc equipment.

17.4 General:

The installation of the Digital Relay Output Drivers type D5244* / D5244*-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.

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, 2022-09-01
BVS-Ret/Mu A 20220361 / 342710500

A handwritten signature in blue ink, appearing to read "R. K. Schmidt", is written over a horizontal line.

Managing Director