



# 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](http://www.iecex.com)

Certificate No.: **IECEX BVS 16.0071X** Page 1 of 5 Certificate history:  
Status: **Current** Issue No: 1 Issue 0 (2016-10-24)  
Date of Issue: 2022-09-12  
Applicant: **G.M. International S.R.L.**  
Via Mameli 53/55  
20852 Villasanta (MB)  
**Italy**  
Equipment: **Digital Relay Output Driver type D5244\*, D5244\*-xxx**  
Optional accessory:  
Type of Protection: **Intrinsic Safety "i", Type of Protection "n", Increased Safety "e"**  
Marking: Ex ec nC [ia Ga] IIC T4 Gc  
[Ex ia Da] IIIC  
[Ex ia Ma] I

Approved for issue on behalf of the IECEx  
Certification Body:

**Dr Christiane Sultan**

Position:

**Deputy Head of Certification Body**

Signature:  
(for printed version)

Date:  
(for printed version)

2022-09-12

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2. 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](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

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

 **DEKRA**  
On the safe side.



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Manufacturer: **G.M. International S.R.L.**  
Via Mameli 53/55  
20852 Villasanta (MB)  
**Italy**

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

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

[IEC 60079-15:2017](#) Explosive atmospheres - Part 15: Equipment protection by type of protection "n"  
Edition:5.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:5.1

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/ExTR16.0073/01](#)

Quality Assessment Report:

[NO/DNV/QAR07.0005/10](#)



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## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

### Type Code

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)

### 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).

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

- 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.
- 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
    - used in an area with a pollution degree of at least 2 according to IEC 60664-1, and
    - be installed in an enclosure with a degree of protection of at least IP54 in accordance with IEC 60079-0.
- 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.
- 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 IEC 60079-11.



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## Equipment (continued):

### Rating

#### 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 (18...30 V)	$\leq 0.6$
D5244D, D5244D-xxx		$\leq 1.2$

#### 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 <sub>s</sub>	DC 40 V / AC 40 V <sub>s</sub>
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 $\mu$ H	0 $\mu$ H
Remark:	N/A = not applicable	

#### 3. Ambient temperature range $-40\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$



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

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