

(1) **EC-Type-Examination Certificate**

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 94/9/EC**



(3) **Certificate Number** TÜV 15 ATEX 170897 X

(4) for the equipment: Load Cell / Strain Gauge Bridge Isolating Repeater/Converter type D5263S and D5264S

(5) of the manufacturer: **G.M. International S.r.l.**

(6) Address: Via Mameli, 53-55
20852 Villasanta (MB) - Italy

Order number: 8000454062

Date of issue: 2016-04-18

- (7) The design of this equipment or protective system and any acceptable variation thereto are specified in the schedule to this EC-Type-Examination Certificate and the documents therein referred to.
- (8) The TÜV NORD CERT GmbH, notified body No. 0044 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems 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. 15 203 170897.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2012 +A11:2013 EN 60079-11:2012 EN 60079-15:2010
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC-type-examination certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment or protective system must include the following:

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

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the notified body



Schwedt

Hanover office, Am TÜV 1, 30519 Hannover, Fon +49 (0)511 986 1455, Fax +49 (0)511 986 1590

This certificate may only be reproduced without any change, schedule included.
Excerpts or changes shall be allowed by the TÜV NORD CERT GmbH

j(13) **SCHEDULE**

(14) **EC-Type-Examination Certificate No. TÜV 15 ATEX 170897 X**

(15) Description of equipment

The D5263S and D5264S modules are Associated Apparatus designed as single channel galvanic isolators to interface Intrinsically Safe apparatus field devices located in Hazardous Area with non-intrinsically safe measuring and process control equipment located in non-explosive atmosphere. They are packaged in a plastic enclosure suitable for installation on T35 DIN Rail according to EN50022, with or without Power Bus connector, or on Termination Board (only for D5264S) provided with customer dedicated connection, and located in non-explosive atmospheres or potentially explosive gas atmospheres.

Electrical connections are accommodated by plug-in removable terminal block or with customer dedicated connector when installed on Termination Board (only for D5264S). Supply voltage can optionally be fed through the Termination Board or by the Power Bus connector installed on DIN Rail.

The D5263S module (Strain Gauge Bridge Isolating Repeater) provides a fully floating supply voltage with remote sensing capability to a strain gauge located in potentially explosive atmosphere and repeats, with isolation, the mV signal output to drive a load or other measuring equipment located in non-explosive atmosphere. The unit typically acts as a transparent galvanic isolated interface installed between a weighting indicator and a load cell (or a group of up to 10 load cells).

The D5264S module (Load Cell/Strain Gauge Bridge Isolating Converter) provides a fully floating supply voltage with remote sensing capability to strain gauge located in potentially explosive atmosphere and converts the strain gauge mV signal to a totally floating (that is, isolated from input and supply) 0/4-20 mA analogue signal (providing both current source and sink capabilities) to drive a load or other measuring equipment located in non explosive atmosphere. In addition, the unit provides an opto-coupled open collector transistor (photo-MOS) alarm output.

Permissible range of ambient temperature: -40°C to +70°C.

The following variants are covered by this certificate:

- D5263S
- D5263S-xxx
- D5264S
- D5264S-xxx

Electrical data:

Safe area connections at terminal block

Power Supply

Power supply.....	Rated Voltage U_n : 24Vdc nominal (18 to 30 V)
(terminals : 9 (+) and 10 (-))	Maximum Voltage U_m : 250Vac

Output

Weighting indicator..... Maximum Voltage U_m : 250Vac
 (terminals for D5263S: 1 (Ch1 EXC+) and 4 (Ch1 EXC-), 2 (Ch1 Sense+) and 3 (Ch1 Sense-), 5 (Ch1 IN+) and 6 (Ch1 IN-))
 (terminals for D5264S: 1 and 2 (output), 3+ and 4- (Alarm out), 11 A- and 12 B+ (Modbus))

Hazardous area connections at terminal block

Load cell.....	$U_o = 7.2 \text{ V}$
(terminal: 13 (Ch1 EXC+) and 16 (Ch1 EXC-))	$I_o = 177 \text{ mA}$
14 (Ch1 Sense+) and 15 (Ch1 Sense-)).....	$P_o = 471 \text{ mW}$
17 (Ch1 IN+) and 18 (Ch1 IN-)).....	$C_o = 0.3 \mu\text{F}$ (IIC), $1.5 \mu\text{F}$ (IIB and IIIC), $2.2 \mu\text{F}$ (IIA), and $2.8 \mu\text{F}$ (I)
	$L_o = 0.5 \text{ mH}$ (IIC), 6.5 mH (IIB and IIIC), 9.5 mH (IIA), 13 mH (I)
	$C_i = 1.1 \mu\text{F}$
	$L_i = \text{negligible}$

(16) Test documents are listed in the test report No. 15 203 170897

(17) Special conditions for safe use

The device for installation in zone 2 has to be installed in an additional enclosure with a degree of protection of at least IP 54 according to the EN 60079-15.

(18) Essential Health and Safety Requirements

no additional ones