



# eurofins



## Type Examination Certificate

for Electrical Equipment used in Potentially Explosive Atmosphere

Issued by Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK	
Applicant	G.M. International S.r.l. Via Mameli, 53-55, 20852 Villasanta (MB), Italy
Manufacturer name	G.M. International S.r.l. Via Mameli, 53-55, 20852 Villasanta (MB), Italy
Product name	Intrinsically Safe Isolation Barrier (for strain gauge)
Type/model code	D5263S and D5264S Refer to Attachment 1
Type of protection	Increased safety, Intrinsic Safety
Group, Temperature Class and EPL	IIC T4 Gc IIIC
The equipment shall be marked with the following	Ex ec [ia Ga] IIC T4 Gc [Ex ia Da] IIIC
Ratings	Refer to Attachment 1
Special condition for safe use	Refer to Attachment 2
Certificate number	<b>CML 20JPN2136X</b>
Term of validity	From 02-07-2020 to 01-07-2023 
	From 02-07-2023 to 01-07-2026 

This is to certify that the equipment specified above complies with the requirements stipulated in Ordinance on Examination of Machines and Other Equipment of the Ministry of Health, Labour and Welfare, Japan.

Issue date: 02-07-2023

Signature of chief examiner:





# eurofins



**CML 20JPN2136X**

**Issue: 2**

## Attachment 1 - Type / model code and Ratings

### Type/ model code:

D5263S  
D5263S-xxx  
D5264S  
D5264S-xxx

### Ratings:

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

### Electrical data:

#### Safe area connections at terminal block

#### Power Supply

(Terminals : 9 (+) and 10 (-))

For connection to a non-intrinsically safe circuit with following values:

Rated Voltage $U_n$ =	24 Vdc nominal (18 to 30 Vdc)
Maximum Voltage $U_m$ =:	250 V rms

#### Output

Weighting indicator

(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))

For connection to a non-intrinsically safe circuit with a safety maximum voltage:

Rated Voltage $U_n$ =	4 V < $U_n$ < 15 V d.c
Maximum Voltage $U_m$ =	250 V rms

#### Hazardous area connections at terminal block

Load cell

(Terminal: 13 (Ch1 EXC+) and 16 (Ch1 EXC-) 14 (Ch1 Sense+) and 15 (Ch1 Sense-) 17 (Ch1 IN+) and 18 (Ch1 IN-))

In type of Protection Intrinsic Safety Ex ia I/IIA/IIB/IIC/IIIC with following maximum values:

$U_o$ =	7.2 V
$I_o$ =	177 mA
$P_o$ =	471 mW
Characteristic line =	Trapezoidal



R = 60Ω  
 Effective internal capacitance Ci = 1.1μF  
 Effective internal inductance Li = Negligibly small

The maximum permissible values for the external inductance Lo and the external capacitance Co have to be taken from the following table:

Ex ia IIC	Lo [mH]	0.5	0.2	0.05	0.01	0.002
	Co [μF]	0.5	1.3	2.8	6.1	12.4

Ex ia IIB/IIIC	Lo [mH]	8.7	5	0.5	0.2	0.002
	Co [μF]	2.6	4.8	13.9	18.9	238.9

Ex ia IIA	Lo [mH]	16	10	5	0.2	0.005
	Co [μF]	11.9	15.9	22.9	72.9	998.9

### Attachment 2 - Special Conditions for Safe Use

The following condition relates to the safe installation and/or use of the equipment:

i.	The Intrinsically Safe Isolation Barrier (D5263S; D5263S-xxx; D5264S and D5264S-xxx) must be installed in a suitable enclosure with a minimum of IP54. A pollution degree 2 or less must be achieved.
ii.	Intrinsically Safe Isolation Barrier (D5263S; D5263S-xxx; D5264S and D5264S-xxx) installation must ensure the maximum ambient temperature is not exceeded during use.
iii.	The connecting and disconnecting of the non-intrinsically safe circuits is only permitted if no explosive atmosphere exists.