



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

Certificate No.: **IECEX ULD 22.0034X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2022-12-19

Applicant: **G.M.International srl**
Via G. Mameli, 53-55S
Villasanta
MB 20852
Italy

Equipment: **Transmitter Current Repeater, D5016**_*****

Optional accessory:

Type of Protection: **Increased Safety "ec", Intrinsic Safety "ia"**

Marking: Ex ec [ia Ga] IIC T4 Gc
[Ex ia Da] IIIC
[Ex ia Ma] I
Tamb: -40°C to +70°C

Approved for issue on behalf of the IECEx
Certification Body:

Erin LaRocco

Position:

Staff Engineer

Signature:
(for printed version)

Erin LaRocco

Date:
(for printed version)

2022-12-19

1. This certificate and schedule may only be reproduced in full.
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 or use of this QR Code.



Certificate issued by:

UL International DEMKO A/S
Borupvang 5A
DK-2750 Ballerup
Denmark





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Manufacturer: **G.M.International srl**
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Manufacturing locations: **G.M.International srl**
Via G. Mameli, 53-55S
Villasanta
MB 20852
Italy

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 60079-7:2017](#) 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:

[DK/ULD/ExTR22.0037/00](#)

Quality Assessment Report:

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



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

D5016 series are associated apparatus and increased safety electrical apparatus, designed as single/double channel galvanic isolators, to interface intrinsically safe field devices located in potentially explosive atmospheres with non-intrinsically safe measuring and process control equipment located in non-explosive atmospheres. They are packaged in a plastic enclosure suitable for installation on IEC60715 TH 35 DIN-Rail, with or without Power Bus connector, or on Termination Board provided with customer dedicated connection.

D5016 modules can be 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.

Please see Annex for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- For installations in which both the Ci and Li of the Intrinsically Safe apparatus exceeds 1% of the Co and Lo parameters of the Associated Apparatus (excluding the cable), then 50% of Co and Lo parameters are applicable and shall not be exceeded. The reduced capacitance of the external circuit (including the cable) shall not exceed 1uF for Groups I, IIA and IIB and 600 nF for Group IIC.
- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.
- For hazardous location, the unit shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with IEC 60079-0, that must have a door or cover accessible only by the use of a tool.

Annex:

[Annex to IECEx ULD 22.0034X Issue 0.pdf](#)



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TYPE DESIGNATION

Model Nomenclature:

D5016	S	S	-xxx
I	II	III	IV

I – Model designation:

D5016 – I.S. SIL3 4-Wire HART® Transmitter Current Repeater

II – No. of Channel:

S – 1 channel

D – 2 channel

III – Output type:

S – Source output

K – Sink output

IV: Configuration – Optional:

-xxx – Any alpha-numeric character denoting pre-delivery testing or configuration requested by end-user. No changes are made to construction of the device.

PARAMETERS RELATING TO THE SAFETY

Electrical ratings:

Model	Supply voltage (terminals 5-6)	Current consumption	Power consumption	Input	Output
D5016SS-xxx	24V dc (18-30V dc)	33 mA	1.0W max.	4-20mA Terminals 7-8	Source output 4-20mA Terminals 1-2
D5016SK-xxx		20 mA	0.6W max.		Sink output 4-20mA 2-30V dc Terminals 1-2
D5016DS-xxx		57 mA	1.6W max.	4-20mA Terminals 7-8 and 9-10	Source output 4-20mA Terminals 1-2 and 3-4
D5016DK-xxx		31 mA	0.9W max.		Sink output 4-20mA 2-30V dc Terminals 1-2 and 3-4

Other (I/O): 1 x BUS

Intrinsically safe specifications:

Um: 250V rms or Vdc

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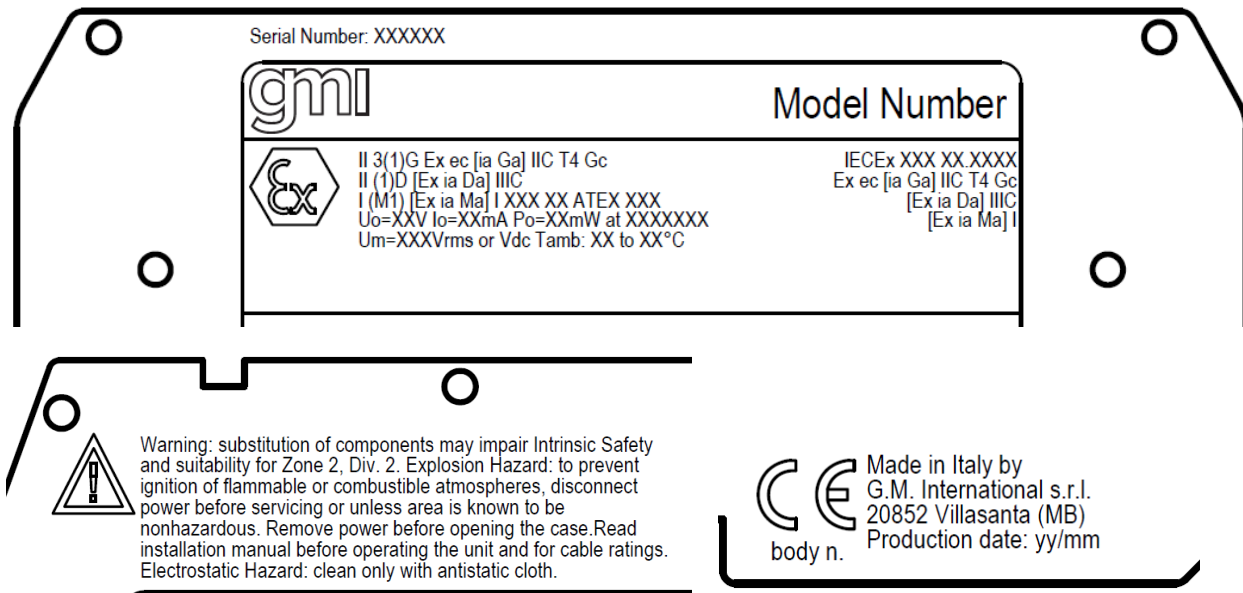
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Terminals		Group	Co [μ F]	Lo [mH]	Lo/Ro [μ H/ Ω]
7-8 (Ch1) 9-10 (Ch2)	Uo: 8.8V Io: 0 mA Po: 0 mW	IIC	5.4	1000	N/A
		IIB or IIIC	45.9	1000	N/A
	Ui: 30V Ii: 100mA Ci: 1.1nF Li: 0nH	IIA	729.9	1000	N/A
		I	999.9	1000	N/A

MARKING

Marking has to be readable and indelible; it has to include the following indications:



Model Number: D5016SS, D5016SK, D5016DS, D5016DK, D5016SS-xxx, D5016SK-xxx, D5016DS-xxx, D5016DKxxx.

IECEX Certification: IECEX ULD 22.0034X.

ATEX Certification: UL 22 ATEX 2892X.

Electrical Parameters:

Electrical ratings, $U_m \leq$ value indicated in the certificate,

$U_o, I_o, P_o \geq$ value indicated in the certificate at terminals 7-8, 9-10.

$U_i \leq$ value indicated in the certificate, $I_i \leq$ value indicated in the certificate,

$C_i, L_i \geq$ value indicated in the certificate at terminals 7-8, 9-10.

Ambient Temperature: $T_{amb} \geq$ lower value to \leq higher value indicated in the certificate.



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ROUTINE EXAMINATIONS AND TESTS

Each piece of equipment shall be subjected to the routine tests for transformers in accordance with Clause 11.2 of IEC 60079-11. A test voltage of 1500V rms shall be applied between T300 and T400 pins 5-6 and pins 1-4 for a minimum of 60s without breakdown resulting in more than 5mA rms flowing. Alternatively, a test voltage of 1800V rms for a minimum of 1s may be used.