



[1]

TYPE EXAMINATION STATEMENT CATEGORY 3 EQUIPMENT

- Equipment intended for use in potentially explosive atmospheres ATEX
- [3] Type Examination Statement number: **IMQ 09 ATEX 013 X**

[4] PRODUCT: Galvanic DIN rail isolator

Type/series: D1***; D1***/B; D1***-xxx; D1***-xxx/B; PSD1***; PSD1***C

[5] MANUFACTURER: G.M. International S.r.l.

ADDRESS: Via Mauro Macchi, 27

[6] Vid Madio Maccin, 27
20124 Milano (MI) – Italy

- [7] This equipment and any acceptable variation thereto are specified in the annex to this statement and the documents therein referred to.
- [8] IMQ states that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive 2014/34/EU with reference to the requirements covered by the standards below defined.

The examination and test results are recorded in Report No.:

AT18-0022294-01/02

[9] Compliance with Essential Health and Safety Requirement given in the Directive, except for those listed at item 18 of the annex, has been assured by compliance with the requirements of the following standard:

EN 60079-0:2012; EN 60079-0:2012/A11:2013; EN 60079-15:2010

- [10] If the sign "X" is placed after the statement number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this statement
- [11] This TYPE EXAMINATION STATEMENT relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this statement.
- [12] The marking of the equipment or protective system shall include the following:

 $\langle \epsilon_{x} \rangle$

II 3G Ex nA IIC T4 Gc or

II 3G Ex nAC IIC T4 Gc

This document is composed of 4 pages including 1 annex

B.U. PRODUCT CONFORMITY ASSESSMENT CERTIFICATION SECTOR – MANAGER

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Stefano Ferrari

This Test Statement is the result of testing a sample of the product submitted, in accordance with the provisions of the specified Technical Specifications/Standards. It is issued according to product certification scheme type 1 of EN ISO/IEC 17067; therefore, it does not imply any judgment on the production and it does not permit the use of a mark of conformity. Only full reproductions of this Statement are allowed without written permission of IMQ.



[13] ANNEX

[14] Type Examination Statement number: IMQ 09 ATEX 013 X

Description of product:

[15] Galvanic DIN rail isolator for plant of process control with analogue and digital signal, single or multiple channels and standard signal of conditioning.

Models/Series Identification:

Key code:

*** = coding is detailed in the table xxx = refers to functionally diversified versions /B = power bus enclosure

[15.1]

Model	Marking
D1010, D1012, D1014, D1020, D1022, D1031, D1033, D1034, D1035, D1040 D1041, D1042, D1043, D1045, D1046, D1052, D1060, D1061, D1062, D1063 D1064, D1072, D1081, PSD1001, PSD1001C	
D1021, D1030, D1032, D1044, D1053, D1054, D1073, D1080, D1092, D1092, D69, D1093, D1130, D1180	Ex nAC IIC T4 Gc

Ratings:

Supply: 12-24Vdc or 115-230 Vac

Relais circuits: 115 – 250Vac

2 - 3 A

Power: up to 4,2W

[15.2] Signals: 27Vdc (analog in)

15,5Vdc (i digital in) 25,2 Vdc (analog out) 24,9 Vdc (analog)

Temperature: 10,8Vdc (temperature)

[15.3] **Safety Ratings:** -

Ambient temperature and temperature classes:

[15.4] The insulators shall be used in a temperature range: -40°C ÷ 60°C

[15.5] **Degree of protection (IP code):** IP20

Warnings:

- Warning: read installation manual before operating the unit. Remove power before opening the case.
- Warning: substitution of components may impair Safety and suitability for Zone 2.
 - Explosion Hazard: to prevent ignition of flammable or combustible atmospheres, disconnect power before servicing or unless area is known to be non-hazardous.
 - Electrostatic Hazard: clean only with a damp or antistatic cloth.
- [16] **Report:** AT18-0022294-01/02



[13] ANNEX

[14] Type Examination Statement number: IMQ 09 ATEX 013 X

[16.1] Routine (factory) tests:

The manufacturer must carried out the routine test prescribed at clauses 27 of the EN 60079-0 and the clause 23 of EN 60079-15.

The routine test of EN 60079-15 is the following:

• Voltage test (23.2.1 or 23.2.2 in alternative).

[16.2] Conformity with the documentation:

The manufacturer shall carry out the verifications or tests necessary to ensure that the product complies with the documentation.

Marking the equipment in accordance with Clause 29 of EN 60079-0, the manufacturer attests on his own responsibility that:

- the equipment has been constructed in accordance with the applicable requirements of the relevant standards in safety matters;
- the routine verifications and routine tests in 28.1 of EN 60079-0 have been successfully completed with positive results.

[16.3] **Installation conditions:**

Above referred equipment is foreseen to be installed in locations where there are environmental conditions, as clearly specified at clause 1, par. 2 of EN 60079-0.

Installation and use in atmospheric and environmental conditions that are out of above mentioned intervals request special considerations and additional measures by the side of installer or user.

These should be specified to the manufacturer by the user;

It is not a required by applicable standard listed in [9] that the certification body confirm suitability for the adverse conditions.

The equipment shall be used in compliance with indications given by the manufacturer with user instructions.

Special Condition of use (X):

According clause 13 of the EN 60079-15, the user shall verify the following conditions:

- pollution degree 2 (according EN 60664-1 according to the Overvoltage Category);
 - degree of protection IP54 minimum (according to EN 60529);
 - provision against overvoltage within the 40% of the supply.

[18] Essential Health and safety Requirements:

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed in [9].

This Certificate **does not** cover hazards coming from environmental conditions different from those clearly and precisely indicated and covered in clause 1 of EN 60079-0.

ESHR 1.2.7 According Annex VIII of the Directive

ESHR 1.4 Not verified.

ESHR 1.5 Not verified.

ESHR 3 Not applied.

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at [9], the following are considered relevant to this product, and conformity is demonstrated in the report:

[17]



[13] ANNEX

[14] Type Examination Statement number: IMQ 09 ATEX 013 X

n/a

Descriptive documents:

[19] DL-AT18-0022294-01, Rev.0, dated 2018-09-04.

[20] Certification Validity Conditions:

The present Statement is not referred to IMQ certification activities as Notified Body according to 2014/34/EU Directive. The validity of this Statement is subject to the condition that the manufacturer complies with the results of the document review and of the pertinent requirement if any included, recorded in the relevant copy of documentation as per 19.

One copy of the mentioned documentation is kept in IMQ file.

[21] Variations:

- 2009, July: first issue
- <u>2013, March:</u> standard updating.
- <u>2014, April:</u> editorial upgrade.
- <u>2015, May:</u> standard updating.
- <u>2019, January:</u>

updating to new ATEX Directive (2014/34/UE), updating descriptive documents and updating reference of type/series.