



TYPE EXAMINATION STATEMENT CATEGORY 3 EQUIPMENT

[1]

[2]

Equipment intended for use in potentially explosive atmospheres

[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.**

[6]

ADDRESS: **Via G. Mameli, 53/55, 20852 Villasanta (MB) – Italy**

[7]

IMQ states that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of Category 3 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.

[8]

Compliance with EHSRs given in the Directive 2014/34/EU, except for those listed at item 17 of the annex, has been assured by compliance with the requirements of the following standard:

EN IEC 60079-0:2018; EN 60079-7:2015; EN IEC 60079-7:2015/A1:2018; EN 60079-15:2010

Other reference standards: **EN IEC 60079-0:2018/AC2020-02; EN IEC 60079-15:2019**

[9]


If the sign "X" is placed after the statement number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this statement

[10]

This TYPE EXAMINATION STATEMENT relates only to the design and construction of the specified equipment. Further requirements of the Directive are **not covered** by this statement.

[11]

The marking of the equipment shall include the following:

 **II 3G Ex ec IIC T4 Gc**
II 3G Ex ec nC IIC T4 Gc

This document is composed of 4 pages including 1 annex

FIRST ISSUE: 2009/07/02

CURRENT ISSUE: 2022/05/03

PREVIOUS ISSUE: 2019/01/29

EXPIRING DATE: 2032/05/02

**B.U. PRODUCT CONFORMITY ASSESSMENT
CERTIFICATION SECTOR – MANAGER**



PRD N° 005 B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC Mutual Recognition Agreements

[12] **ANNEX**

[13] Type Examination Statement number: **IMQ 17 ATEX 013 X**

[14] **Description of product:**

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

[14.1] **Models/Series Identification:**

Key code:

*** = coding is detailed in the table

- xxx = refers to functionally diversified versions

/B = power bus enclosure

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	Ex ec IIC T4 Gc
D1021, D1030, D1032, D1044, D1053, D1054, D1073, D1080, D1092, D1092-069, D1093, D1130, D1180	Ex ec nC IIC T4 Gc

[14.2] **Ratings:**

Supply: 12-24Vdc
 Relais circuits : 115 – 250Vac (2 – 3 A)
 Power : up to 4,2W
 Signals : 27Vdc (analog in)
 15,5Vdc (digital in)
 25,2 Vdc (analog out)
 24,9 Vdc (analog)
 Temperature: 10,8Vdc (temperature)

[14.3] **Safety Ratings:**

-

[14.4] **Ambient temperature and temperature classes:**

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

[14.5] **Degree of protection (IP code):**

IP20 according EN IEC 60529

[12] ANNEX

[13] Type Examination Statement number: **IMQ 17 ATEX 013 X**

[14.6] Warnings:

- Warning: read installation manual before operating the unit. Remove power before opening the case.
- Warning: substitution of components may impair 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.

[15] **Report:** AT21-0067118-01/02

[15.1] Routine (factory) tests:

The manufacturer shall carry out a dielectric strength test in accordance with EN 60079-7: clause 6.1. Alternatively, a test shall be carried out at 1,2 times the test voltage, but maintained for at least 100 ms.

Anyway, where there is a routine dielectric strength test in the relevant industrial standard for the individual items of electrical equipment, this test is acceptable.

[15.2] 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.

[15.3] Installation conditions:

The equipment is foreseen to be installed in locations where there are environmental conditions, as specified at clause 1 of EN 60079-0. Installation and use at environmental conditions outside of above-mentioned intervals request special considerations and additional measures by the side of installer or user.

Installation of equipment shall be done according to EN 60079-14.

[16] Specific condition of use (X):

According to Annex H of the EN 60079-7, the user shall verify the following conditions:

- Pollution Degree 2 (derived from EN 60664-1 according to the Overvoltage Category);
- enclosure and connections of installation with minimum EPL Gc, with minimum degree of protection IP54
- Provision shall be assured, external to the equipment by the installation location and where not present internally, to provide a transient protection device at a level not exceeding 120 V or 140% of the peak rated voltage of the equipment (whichever is the greater) on power supply connections.

[12] **ANNEX**

[13] Type Examination Statement number: **IMQ 17 ATEX 013 X**

[17] **Essential Health and safety Requirements:**

This Statement **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed in [8].

This Statement **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 to be fulfilled by manufacturer 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 [8], the following are considered relevant to this equipment, and conformity is demonstrated in the report: N/A

[18] **Descriptive documents:** DL-AT21-0067118-01/02.

[19] **Certification Validity Conditions:**

This Statement is subject to general rules for the issuing of products type certificates and to special requirement for equipment intended for use in potentially explosive atmospheres.

This Statement is issued according to product certification system 1a 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.

This statement does not replace the conformity assessment procedure, to be carried out by the Manufacturer, referred to in Annex VIII of Directive 2014/34/EU.

Only full reproductions of this are allowed without written permission of IMQ.

[20] **Variations**

[20.0] 2009, July: first issue

[20.1] 2013, March: standard updating.

[20.2] 2014, April: editorial upgrade.

[20.3] 2015, May: standard updating.

[20.4] 2019, January: updating to new ATEX Directive (2014/34/EU) and updating of part lists.

[20.5] 2022, May: Updating to new EN standards; new marking