



TYPE EXAMINATION STATEMENT CATEGORY 3 EQUIPMENT

[1]

[2]

Equipment intended for use in potentially explosive atmospheres

[3]

Type Examination Statement number: **IMQ 17 ATEX 009 X**

[4]

PRODUCT: **DIN rail isolator**
TYPE/SERIES: **D5098S , D5098D, D5098S-*** , D5098D-*****

[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 nC IIC T4 Gc**

This document is composed of 4 pages including 1 annex

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**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

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[14] **Description of product:**

Single (D5098S) and dual (D5098D) channel Relay Output modules, suitable for the switching of safety related circuits, providing isolation between input and output contacts.

D5098S provides one NO contact for normally energized loads and one NC contact for service purposes.

D5098D provides two NO contacts for two normally energized loads and two NC contact for service purposes.

The "-xxx" marking can be added to the normal marking to indicate a particular version, configuration or other user requirement, for functionally diversified versions not affecting the safety requirements.

Mounting on standard DIN-Rail or on customized Termination Boards, in Safe Area or in Zone 2.

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

D5098S , D5098D, D5098S-*** , D5098D-***

[14.2] **Ratings:**

Un: 24 V DC

Power dissipation @ 24 V: 1,1 W (D5098S) - 1,2 W (D5098D)

Contact ratings: 250 V AC / DC, 5 A up to +60 °C, 2 A @ +70 °C

[14.3] **Safety Ratings:**

-

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

The insulators shall be used in a temperature range: $-40 \div +70$ °C;

T4 temperature class.

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

IP 20 according to EN IEC 60529.

[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:** AT21-0067118-01/04

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[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.

[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.

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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-AT21-0067118-01/04

[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.

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[20] **Variations**

[20.0] 2017, July: first issue

[20.1] 2017, August: added D5098S-*** and D5098D-*** model reference with explanation of -*** suffix

[20.2] 2022, May: Updating to new EN standards; new marking