

EU-TYPE EXAMINATION CERTIFICATE



Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

- [1] EU-Type Examination Certificate Number: **UL 21 ATEX 2562X Rev. 2**
- [2] Product: **Vibration Transducer Interface, D5062S Series**
- [3] Manufacturer: **G.M. International srl**
- [4] Address: **Via G. Mameli, 53-55S, Villasanta, MB, 20852 Italy**
- [5] This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- [6] UL International Demko A/S, notified body number 0539 in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.
- The examination and test results are recorded in confidential report no. **DK/ULD/ExTR21.0018/02.**
- [7] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018 EN 60079-11:2012**
- Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.
- [8] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.
- [9] This EU-Type Examination Certificate relates only to the technical design of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by the certificate.
- [10] The marking of the product shall include the following (marking is provided in the Schedule as a part of item 15, if applicable):

II 3 (1) G Ex ec [ia Ga] IIC T4 Gc
 II (1) D [Ex ia Da] IIIC
 I (M1) [Ex ia Ma] I

Certification Manager
Thomas Wilson

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2021-11-03

Re-issued: 2023-10-19

Notified Body UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com



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Schedule

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[15] Description of Product

The single channel DIN Rail Vibration Transducer Interface Model D5062S is an isolated intrinsically safe associated apparatus module intended for installation in Zone 2 explosive gas atmospheres / hazardous locations or in non-explosive atmospheres / non-hazardous locations.

The module provides galvanically isolated, intrinsically safe circuits with assigned entity parameters. It provides a fully floating dc supply for energizing vibration transducers, accelerometers or 2-3 wires sensors located in Hazardous Area, and repeats the sensor input voltage in a totally isolated circuit located in Safe Area to drive vibration monitors or analyzers for rotating machinery control and supervision purposes.

Model D5062S is packaged in a plastic enclosure suitable for installation on standard DIN Rail, with or without Power Bus connector, or on Termination Boards provided with customer dedicated connection.

Electrical connections are accommodated by plug-in removable terminal block or with customer dedicated connector when installed on Termination Board. Supply voltage can optionally be fed through the Termination Board or by the Power Bus connector installed on DIN Rail.

Nomenclature for D5062S series:

D5062	S	-XXX
I	II	III

I – Model designation:
D5062 – DIN-Rail Vibration Transducer Interface

II – No. of Channel:
S – Single channel

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

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 1) to the scope of EN 60079-28:2015.

Temperature range
The ambient temperature range is -40 °C to +70 °C.

Electrical Rating:

Model	Nominal Input Voltage	Nominal Current Consumption	Nominal Power Dissipation
D5062S	Terminals 5-6: 24V dc	90 mA	2.3 W

Intrinsically safe specifications:

U_m : 250 V rms

Terminals	Entity Parameters	Group	Co [µF]	Lo [mH]	Lo/Ro [µH/Ω]
7-8-9-10	U _o = 27 V I _o = 90 mA P _o = 576 mW	IIC	0.09	4.1	56.8
		IIB / IIIC	0.7	16.4	227.3
		IIA	2.3	33.9	454.7
		I	3.75	54	746.1
7-8 or 8-9	U _i = 30V I _i = 91 mA C _i = 0 nF L _i = 0 nH				

Routine tests

Each piece of equipment shall be subjected to the routine tests for transformers in accordance with clause 11.2 of EN 60079-11. A test voltage of 1500V rms shall be applied between T100 pins 5-6 and pins 3-4 and between T300 pins 5-6 and pins 1-2 and 3-4 for a minimum of 60 s without breakdown resulting in more than 5mA rms flowing. Alternatively, a test voltage of 1800V rms for a minimum of 1 s may be used.

[16] Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

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Specific conditions of use:

- 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 (50 % of the Co and Lo become the limits which must include the cable such that Ci device + Ccable \leq 50 % of Co and Li device + L cable \leq 50 % of Lo). The reduced capacitance of the external circuit (including the cable) shall not be greater than 1 μ F 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 EN 60664-1.
- For hazardous locations, the unit shall be installed in an enclosure that provides a minimum ingress protection of IP 54 in accordance with EN 60079-0, that must have a door or cover accessible only by the use of a tool.

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Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information



The trademark  will be used as the company identifier on the marking label.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.