

# CERTIFICATE



Italia

[1] **EU-TYPE EXAMINATION CERTIFICATE**

[2] **Equipment or Protective System intended for use  
in potentially explosive atmospheres  
Directive 2014/34/EU**

[3] EU-Type Examination Certificate number:

**TÜV IT 24 ATEX 0231 X**

[4] Equipment or Protective System: Diodes safety barrier mod. SAFE PASS

[5] Manufacturer: ALISONIC S.r.l.

[6] Address: Via Ercolano, 3  
I-20900 Monza (MB) - ITALY

[7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] TÜV Italia, notified body no. 0948 in accordance with Article 17 of 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. R 24 EX 084.


[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN IEC 60079-0 : 2018 ; EN 60079-11 : 2012 ; EN 60079-26:2015**

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EU - TYPE EXAMINATION CERTIFICATE 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 certificate.

[12] The marking of the product shall include the following:

 **II (1)G [Ex ia Ga] IIB**

This certificate may only be reproduced in its entirety and without any change, schedule included.

Issue date: 07<sup>th</sup> October 2024



PRD N° 081B

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



**TÜV Italia S.r.l.**  
**Notified body N° 0948**

  
**Alberto Carelli**

**Industry Service - Real Estate & Infrastructure  
Managing Director**

TÜV Italia has been authorized by Italian government to operate as notified body for the certification of equipment or protective system intended for use in potentially explosive atmospheres. This document is not valid without official signature and logo. The internal reference code is 722347120.

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[13]

**SCHEDULE**

[14]

**EU-TYPE EXAMINATION CERTIFICATE  
no. TÜV IT 24 ATEX 0231 X**

Italia

**Certificate History**

Revision:	Description:	Report rev.:	Issue Date:
-	First issued	-	07/10/2024

[15] **Description of equipment**

The equipment is a series of passive diodes safety barrier (associated apparatus) which provides intrinsically safe interface to devices located in hazardous area. The equipment contains two different channels (interface ports):

- nr.1 Power supply output
- nr.1 RS485 interface communication

Each interface port is protected by protection method intrinsically safe type "Ex ia".

The barrier is intended for installation in non-hazardous area (safe zone).

The device essentially consists of a PCB assembly mounted in a plastic standard enclosure 1 DIN module.

The associated apparatus is powered by means of 12Vdc external power supply.

The terminals of safe connection and terminals of hazardous connection are placed in opposite side of the enclosure. The earth connection it is mandatory and provided by two unscrewing connections.

**Rated characteristics**

<b>Operating ambient temperature range</b>	-40°C ÷ +70°C
<b>Main Power supply</b>	11...15Vdc, 12Vdc 2A rated
<b>Case protection degree</b>	IP 40 (EN60259)
<b>Case material</b>	PPO self-extinguish
<b>Output power supply</b>	12Vdc , 100mA (rated)
<b>Communication interface</b>	nr.1 RS485 standard 5V rated

Safety parameters:

Interface	Um (Vrms)	Ui (V)	Ii (mA)	Pi (mW)	Ci (uF)	Li (uF)	Uo (V)	Io (mA)	Po (mW)	Co (uF)	Lo (uH)	Lo/Ro (uH/Ω)
Pwr.supply		-	-	-	-	-	19.5	85	415	1.47	398	32.5
RS485 Data sect.	253	8.5	-	-	-	-	6.93	212	368	300	3000	387

The equipment which has been to be connected to the interfaces port must be ATEX separately certified and matching the safety parameters above declared.

**Warning label**

WARNING – CONNECT TO POWER SUPPLY SELV CLASSIFIED (Safety Extra Low Voltage).

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[13]

**SCHEDULE**

[14]

**EU-TYPE EXAMINATION CERTIFICATE  
no. TÜV IT 24 ATEX 0231 X**

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[16] **Report no.** R 24 EX 084**Routine tests**

The intrinsically safe parts of circuit who correspond with the interfaces of connection to the hazardous area are tested by the manufacturer in agreement to EN 60079-11:2012 §11.1.

[17] **Special conditions for safe use**

- The equipment is designed for -40°C...+70°C operative ambient temperature range.
- Installation must be conducted following the applicable requirements of standard EN 60079-14 and EN 60079-25.
- The equipment must be connected only to a power supply source type SELV (Safety Extra Low Voltage).

[18] **Essential Health and Safety Requirements**

Assured by compliance with the standards set out in the [9].

[19] **Drawings and Documents****Listed documents (prot. 722347120)**

Title:	Description:	Pages:	Rev:	Date:
SKE007 SafePass Technical file	Technical file/risk analysis and ATEX nameplate	20	00	27/05/2024
SCH_SKE0071_REV01	Schematic circuit and PCB layers	10	01	19/09/2024
PCB_SKE071_REV01	Gerber files package	Rar 17files 256KB CRC32: 85F5B327	01	02/09/2024
BOM_SKE071_REV01_n00	Bill of materials	01	01	02/09/2024
Man_SafePass	Instruction manual and safety notes	12	00	07/2024

One copy of all documents is kept in TÜV Italia files.

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