[1] # EU-TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use in potentially explosive atmospheres - Directive 2014/34/EU – Annex III – MODULE B: EU-TYPE EXAMINATION**

[3] EU-type Examination Certificate number: **IMQ 25 ATEX 049 X**

[4] PRODUCT: **Temperature sensor**

TYPE/SERIES: **Type 245P104B096**

[5] MANUFACTURER: **AE.CAS. S.r.l.**

[6] ADDRESS: **Via Novara 1 – Nova Milanese (MB) 20834 - Italy**

[7] This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documents therein referred to.

[8] IMQ, notified body N° 0051, 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 equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in Report No.: **AT24-0110502-01**

[9] Compliance with Essential Health and Safety Requirements, except in respect of those listed at item 18 of the annex, has been assured by compliance with:

EN IEC 60079-0:2018; EN 60079-11:2012

Other reference standard: EN IEC 60079-0:2018/A1:2024

[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 equipment or protective system shall include the following:

II 2G Ex ib IIC T4 Gb

THIS CERTIFICATE CANCELS AND REPLACES THE PREVIOUS ONE. IT INCLUDES 1 ANNEX.

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B.U. PRODUCT CERTIFICATION SECTOR - MANAGER

[13] Annex

[14] EU-type Examination Certificate number: **IMQ 25 ATEX 049 X**

[15] **Description of product:**
The Temperature Sensor has the purpose of constantly monitoring the temperature of the fuel inside the tank. The sensor is intended to be installed on a solenoid valve.
Each assembly consists of a sensor element encapsulated within a steel probe by using a two-component resin. 2 cables come out of the sensor which are connected with another wiring with a maximum length of 6 meters.
The sensor will vary the value of its resistance (Negative Temperature Coefficient) in relation to the ambient temperature at which it is. Its nominal value is 2,7 kΩ at 25°C.
The sensor must be supplied with a maximum voltage value of 10 Vdc and a maximum current value of 30 mA.

[15.1] **Models/Series Identification:**
Sensor code: 245P104B096

[15.2] **Ratings:** See safety ratings below.

[15.3] **Safety Ratings:**
Ui = 10 V, Ii = 30 mA, Pi = 75 mW, Ci = 400 pF Li = 3 µH

[15.4] **Ambient temperature and temperature classes:**
Ambient temperature: -40 °C ÷ +105 °C.
Temperature Class: T4

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

[15.6] **Warnings: -**

[16] **Report:** AT24-0110508-01

[16.1] **Routine (factory) tests:**
The manufacturer shall carry out the routine test and verifications prescribed at clause 27 and 28.1 of the EN 60079-0.
The manufacturer shall carry out a dielectric routine test at 600 V maintained for at least second, on complete device, with a maximum leakage current of 5 mA.

[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.

[13] # Annex

[14] EU-type Examination Certificate number: **IMQ 25 ATEX 049 X**

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.
Installation of equipment has to proceed according to EN 60079-14.
The sensor must be supplied according to the following intrinsic safety parameters:
Ui = 10 V, Ii = 30 mA, Pi = 75 mW, Ci = 400 pF Li = 3 µH
The system design shall be done according to EN 60079-25 standards requirements.
The ambient temperature must be within the range of -40°C to +105°C.
The sensor operator may be mounted on fixed position on the valve.
The sensor is manufactured for fixed installation only.

[17] **Special Condition of use (X):**
A safety barrier is required by installation to limit power supply to the temperature sensor, according to intrinsic safety parameters specified above [15.3].

[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:
N/A

[19] **Descriptive documents:** DL-AT24-0110502-01 Rev. 0 dated 2025-10-27

[20] **Certification Validity Conditions:**
The use of this Certificate is subject to the Certification Scheme and to the Regulation applicable to holders of IMQ Certificates.
The validity of this certificate 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

Issue 0: 2025, November
- First emission