[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 19 ATEX 045 X**

[4] PRODUCT: **Gas detector**
TYPE/SERIES: **P****** and **P***PE Series**

[5] MANUFACTURER: **Prosense Teknoloji San. Ltd. Sti.**

[6] ADDRESS: Yukari M. Harman Sokak No. 42 – TR-Kartal Istanbul

[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.:
AT19-0035328-01

[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 60079-0:2018; EN 60079-1:2014

[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 db IIC T5/T4 Gb

This document is composed of 4 pages including 1 annex

FIRST ISSUE: 2019 I 10 I 17
CURRENT ISSUE: 2019 I 10 I 17
PREVIOUS ISSUE: -

B.U. PRODUCT CONFORMITY ASSESSMENT
CERTIFICATION SECTOR – MANAGER

[13] # Annex

[14] EU-type Examination Certificate number: **IMQ 19 ATEX 045 X**

[15] Description of product:

P**** and **P***PE Series** gas detectors are equipment designed to detect toxic compounds in industrial environments and classified areas.

They are composed by:

- a gas sensor, contained in a metallic flameproof enclosure and protected by a sinter metal element,
- a metallic flameproof junction box, containing terminals for electric connections and electronic circuits for amplification / conversion / transmission of signals.

The metallic flameproof junction box has up to three threaded openings for cable entry, and one threaded opening on bottom side where the gas sensor metallic flameproof enclosure is fastened.

[15.1] Models/Series Identification:

P**** and **P***PE Series** gas detectors model coding system:

P – (XY) (W) (Z) (PE)

(XY) Gas Type			
30. LPG	**42.** Etnol	**54.** Dioxane	**66.** Sulfur dioxide
31. Methane	**43.** Iso propanol	**55.** Ethane	**67.** Nitrick oxide
32. Petrol vapour	**44.** Carbon monoxide	**56.** Butyle alcohol	**68.** Nitrogen dioxide
33. n Butane	**45.** Acetone	**57.** Stylen	**69.** Chlorine
34. Propane	**46.** Methyl ethy keton	**58.** Propylene	**70.** Hydrocarbon
35. Hexane	**47.** Ethyl acetate	**59.** Xylene	**71.** Carbondioxide
36. Hydrogen	**48.** Ammonia	**60.** Acetylene	**72.** Freon Gas
37. Pentane	**49.** Ethylene	**61.** Benzene	**73.** JP8
38. Touen	**50.** Acetic acid	**62.** Ethylene oxide	**74.** Formaldehyde
39. Methanol	**51.** Butyl acetat	**63.** Vinyl acetat (VAM)	**75.** HCN
40. Heptane	**52.** Cyclo hexane	**64.** Hydrogen sulfide	**76.** Hydrogen peroxide
41. Octane	**53.** Cyclo pentane	**65.** Oxygen	**77.** Nonane

(W) Sensor Head
1. SH10
2. SH20
3. SH30

(Z) Sensor Type
1. Semiconductor
2. Catalytic
3. Infrared
4. Electrochemical
5. Pellistor

Final PE code applies only to gas detectors with SH10 sensor head.

[15.2] Ratings: Vin: 12 -24 Vdc ; Pmax: 2,5 W max

[15.3] Safety Ratings: -

[15.4] Ambient temperature and temperature classes:

Ambient temperature	Temperature class
-40 °C ÷ +40 °C	T5
-40 °C ÷ +50 °C	T4
-40 °C ÷ +70 °C	T4

[15.5] Degree of protection (IP code): IP65 (EN 60529)

[13] # Annex

[14] EU-type Examination Certificate number: **IMQ 19 ATEX 045 X**

[15.6] **Warnings:** -

[16] **Report:** AT19-0035328-01

[16.1] **Routine (factory) tests:**

The manufacturer shall carry out the routine test prescribed at clause 27 of the EN 60079-0.

[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.
Installation and use in atmospheric and environmental conditions that are out of above mentioned intervals require 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 required by applicable standard listed in [9] that the certification body confirm suitability for the adverse conditions.
This equipment shall be installed and maintained according to installation and maintenance standards EN 60079-14 and EN 60079-17, and strictly in compliance with details listed in manufacturer's use and safety instructions.

[17] **Special Condition of use (X):**

P**** and **P***PE Series** gas detectors must be installed only with sensor head pointing downwards.
Cable glands and thread adapters used for entry into the enclosure, as well as blanking elements, shall be certified as Ex Components according to protection "d", and suitable for the ambient temperature range specified above.
Electrical components/devices installed inside the junction box must not exceed a total power consumption of 2,5 W in order to ensure compliance with the declared maximum temperature rise.
Sinter disc and sensor head cap is considered a mounting component and must be replaced as a single unit.

[13] # Annex

[14] EU-type Examination Certificate number: **IMQ 19 ATEX 045 X**

[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:
None

[19] **Descriptive documents:** DL-AT19-0035328-01, rev. 0, dated 2019-08-07.

[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**

First issue.