[1]

UNITED KINGDOM CONFORMITY ASSESSMENT

UK-TYPE EXAMINATION CERTIFICATE

[2]

Product or Protective System Intended for use in Potentially Explosive Atmospheres
UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1

[3] UK-Type Examination Certificate No.: **UL22UKEX2376X Rev.0**

[4] Product: Gas Detector series PQ & PX

[5] Manufacturer: Prosense Teknoloji San Ltd. Sti

[6] Address: Cumhuriyet Mh. Mermer Sok. No:16, Kartal, Istanbul 34876 Turkey

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

[8] UL International (UK) Ltd, Approved Body number 0843, in accordance with Regulation 44 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended by UKSI 2019:696), 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 Schedule 1 of the Regulations.
The examination and test results are recorded in the confidential report **DK/ULD/ExTR21.0035/00 and DK/ULD/ExTR22.0009/00.**

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

EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014

Except in respect of those requirements listed at section 19 of the schedule to this certificate.

[10] If the sign “X” is placed after the certificate number, it indicates that the product is subject to specific conditions of use specified in the schedule to this certificate.

[11] This UK-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations 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 2 G Ex db IIC T6 Gb

II 2 D Ex tb IIIC T85°C Db

Certification Manager
Andrew Moffat

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 UKEx 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 Regulations. 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: 2022-07-22

Approved Body UL International (UK) Ltd Unit 1-3 Horizon Kingsland Business Park Wade Road, Basingstoke RG24 8AH, UK
Phone : +44 (0)1256 312100

[13] [14]

Schedule
UK-TYPE EXAMINATION CERTIFICATE No.
UL22UKEX2376X Rev. 0

[15] Description of Product

Prosense PX * PQ series Gas and Vapor Detection Equipment comprised of an Aluminium or Stainless-steel enclosure provided with up to 3 no. threaded entries for field wiring plus one thread for the detector module. The threaded cover allows access to the wiring terminals and PCB's. The equipment is intended to indicate presence of flammable or toxic gases in air or oxygen by atmospheric aspiration only. Optional RS-485 output and relay connection for external annunciation or control are available. PQD and PXD incorporate a sight glass, allowing review of the internal display. Data log function may be provided as well as battery cell back-up (PQ only). Suffix -S indicates SIL2 components are used, however, Functional Safety is not included in this Listing.

Nomenclature:

Gas detector	Display	SIL	Gas type	Sensing head	Sensor type	Cable entry	Certification
PQ = PQ Series gas detector							
PX = PX Series gas detector							
	D- = With display						
	N- = Without display						
		S- = SIL version electronics (SIL not part of this certification)					
			xx = two digits (Gas type not part of this certification).				
				1 = SH10			
				2 = SH20			
				3 = SH30			
					1 = Semiconductor		
					2 = Catalytic		
					3 = Infrared		
					4 = Electrochemical		
					5 = Pellistor		
					6 = PID		
					7 = MPS		
						T1 = 1/2" NPT, 1/2" NPT, 1/2" NPT, 3/4" NPT	
						T2 = 3/4" NPT, 3/4" NPT, 3/4" NPT, 3/4" NPT,	
						T3 = M20, M20, M20, 3/4" NPT	
							C1 = ATEX, UKEX and IECEx

Performance testing

The measuring function of the product for explosion protection, according to Schedule 1 clause 24 of the Regulation 2016 No. 1107 (as amended by UKSI 2019:696) is not covered in this certificate.

Temperature range

The ambient temperature range is -40°C ≤ Ta ≤ +70°C.

Electrical data

Input: 12-24 Vdc, 4 W max.
Signal / output: 4-20mA
Relay: 30Vdc, 1.25 A max.
RS485 / MODBUS: +/-3 Vdc

Routine tests

Routine tests according to EN 60079-1 cl. 16 are not required, as the enclosures have been successfully tested at four times the reference pressure.

[16] Test Report No. (associated with this certificate issue)

The test report no. is provided under item no. [8] on page 1 of this UK-Type Examination Certificate.

[17] Specific conditions of use:

- Flamepaths must not be repaired.
- When the painted enclosure is intended for use in Group III applications, the end user must adhere to the manufacturer's instructions to minimise risk of electrostatic discharge.
- Installed orientation of the equipment must be in accordance with the manufacturer's instructions.
- PX Series gas detectors must be installed only with sensor head pointing downwards.

[13] **Schedule**

[14] **UK-TYPE EXAMINATION CERTIFICATE No.**
UL22UKEX2376X Rev. 0

[18] Conditions of certification:
None

[19] Essential Health and Safety Requirements (Regulations Schedule 1)
In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

Additional information
The PQ and PX series Gas and Vapor Detection Equipment has in addition passed the tests for Ingress Protection to IP6X in accordance with EN60529:1991+A1:2000+A2:2013.

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

The manufacturer shall inform the approved body concerning all modifications to the technical documentation as described in Annex III to UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1.

[13] [14]

Schedule
UK-TYPE EXAMINATION CERTIFICATE No.
UL22UKEX2376X Rev. 0

[20] Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
PQ Series			
Overall Drawing	PQ TD1	1.4	29.04.2021
PQD Sight Glass (Tempered)	PQ TD2	1.1	4.10.2018
PQN Junction Box cover (Alu)	PQ TD3	1.4	10.01.2022
PQN Junction Box cover (SS)	PQ_TD3_SS	1.2	10.01.2022
PQD Junction Box Cover (Alu)	PQ TD4	1.7	10.01.2022
PQD Junction Box Cover (SS)	PQ_TD4_SS	1.5	10.01.2022
PQD Sight Glass cover disk (retainer ring)	PQ TD5	1.1	4.10.2018
Junction Box (Alu)	PQ TD6	1.8	10.01.2022
Junction Box (SS)	PQ_TD6_SS_2	1.2	19.02.2019
O-Ring	PQ TD8	1.2	24.02.2022
SH30 Sensor Head	PQ_TD14	1.3	24.02.2022
SH30 Cap	PQ_TD15	1.5	10.01.2022
Sinter Disc	PQ_TD16	1.0	23.9.2018
SH30 Sinter Nut	PQ_TD17	1	23.9.2018
Sensor Module	PQ_TD21	1.0	29.4.2021
Bottom Base	PQ_TD22	1.1	29.4.2021
PQ Series product Label	PQ_TD24	3.4.2	02.05.2022
PQ Series Fixed Gas and Vapour Detection Equipment User manual	PRS-UM-PQ-EN	5.5.1	22.07.2022
PX Series			
Overall Drawing	PX TD1	1.2	13.5.2022
Display sight glass	PX TD2	1.1	13.5.2022
PXP Junction box cover	PX TD3	1.1	13.5.2022
PXP Junction box cover SS	PX TD3_SS	1.0	13.5.2022
PXD Junction box cover	PX TD4	1.1	13.5.2022
PXD Junction box cover SS	PX TD4_SS	1.0	13.5.2022
PXD Sight glass cover disc	PX TD5	1.0	15.4.2020
Junction Box	PX TD6	1.1	13.5.2022
Junction Box SS	PX TD6_SS	1.0	13.5.2022
O-Ring	PX TD7	1.1	13.5.2022
SH30 Sensor head	PX TD11	1.1	13.5.2022
SH30 Cap	PX TD12	1.0	15.4.2020
Sinter disc	PX TD13	1.0	15.4.2020
SH30 Sinter nut	PX TD14	1.0	15.4.2020
SH30 Sensor Holder	PX TD15	1.0	15.4.2020
Bottom Base	PX TD17	1	15.4.2020
PX Series Product Label	PX_Label_rev1.2	0.2	09.06.2022
Prosense PX Series Gas Detectors User and Safety manual	PRS-UM-PX-EN	1.0	22.07.2022