



QPS Evaluation Services Inc



(1) **Type Examination Certificate**

(2) **Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014**

(3) Type Examination Certificate Number: **QPS 24ATEX5012 X** Issue Number: 0

(4) Product: Gas Analyzer model 'Industrial GC866 Exp'

(5) Manufacturer: AIRMOTEC A.G.

(6) Address: 1 Av. Jean-Honoré Olibet, 33240 Saint André de Cubzac - France

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) QPS Evaluation Services Inc. 81 Kelfield St., Units 7-9, Toronto, ON M9W 5A3, Canada, 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 intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number ATX3113-2.

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

(9)

EN IEC 60079-0 : 2018

EN 60079-1: 2014

EN 60079-2 + AC: 2015

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive 2014/34/EU article 13 apply to the manufacturing process and supply of this product. These are separately certified and not covered by this certificate.

(12) The marking of the product shall include the following:



II 2G Ex db pxb IIB+H2 T4 Gb

Date of certification: 11 July 2025

Rob Kohuch,
Certification Manager
QPS Evaluation Services Inc.

Type Examination Certificate without signature shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by QPS Evaluation Service Inc.

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(13) **SCHEDULE**

(14) **to Type Examination Certificate QPS 24ATEX5012 X**

Issue No. 0

(15) **Description and Electrical data:**

Gas analyzer 'Industrial GC866 Exp' is dedicated to the measurement of sulphured compound or hydrocarbon or VOC and permanent gas. The basic GC 866 instrument consists of a stainless steel 'continuous dilution purged' enclosure, fitted with an external mains input switch, gland arrangements, a bulkhead arrangement and input/output sockets.

The equipment additionally includes a certified purge control system (P&F model 6500, IECEx UL16.0003X), including controller, feedback vent, gas inlet kit and bypass key arrangement.

Internally, the analyzer contains electronic interface boards, an analytical module with valves, power supply, an isothermal oven arrangement, a detector unit and pneumatic/tubing arrangements.

The detector unit forms part of a Gas Containment system. Sampling system is mechanically limited to 4x80ml /min.

When FID option is fitted, flameproof enclosures manufactured by P&F model EJB0, IECEx INE 14.0029X) are equipped with flame arresters manufactured by Airmotec. As an option a Vortec device can be installed: it is supplied by Meech Static Eliminators Ltd., BAS16ATEX0042X.

Analyzer might be fitted with one of several of the below options:

- Micro detector Proto 3
- TCD Cell
- PID
- Gradient temperature oven 70W, 24VDC
- Gradient temperature oven 200W, 24VDC
- Photo Ionization Detector with HV board
- Thermal Conductivity Detector with TCD constant temperature board
- Gradient temperature oven
- Trap
- Piezo valve
- CPREG board
- Alternative enclosure with glass window 6mm
- An external Joystick
- Pump
- Enclosure heater, 150W, 115/230VAC
- Mass Flow Controller
- airmoREL board
- Second set of electronic boards
- Electric actuator
- Hydroxycgom H2 100ml/min
- Due point sensor
- Multi sense board



(13) **SCHEDULE**

(14) **to Type Examination Certificate QPS 24ATEX5012 X**

Issue No. 0

- Insulation of internal panels
- Second electrochemical detector
- Ex i manifold system link to Px purge and pressurization system for fast purging phase
- Level control module
- FID
- Vortex cooler with thermostat and solenoid valve arrangement

Electrical data:

- Power supply: 110/230 Vac; 2.2/1.1 A.

Pressurization data:

- Min.Purge Flow Rate: 9.5 NM3/H
- Min.Purge Time: 22 minutes
- Overpressure (min./max): 5.5 mbar / 10 mbar
- Max.Leakage Flow Rate: 0.1Nm3/h @ 10 mbar
- Min/Max..Supply pressure: 4 bar
- Containment system: 80ml/min max.per channel (Total Max. 320ml/min), Max.inlet pressure: 1 bar.

In case of failure of the main protective air supply, an uninterrupted secured air supply shall be provided as follows:

- Min./Max. Supply Pressure: 4.0 bar
- Min. Overpressure: 5.5 mbar

(16) **Report Number:**

ATX3113-2.

(17) **Specific conditions of use:**

The touchpad guard shall be installed such that the risk of impact is low.

Ambient temperature range is as follows:

- $-20^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$ (without Vortex option)
- $-10^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$ (with Vortex option)

In case of failure of the main protective air supply, an uninterrupted secured air supply shall be provided to ensure minimum Overpressure of 5.5 mbar internally for 15 minutes.

(18) **Essential Health and Safety Requirements:**

Met by compliance with the requirements mentioned in item 9.

(19) **Remarks and additional information:**

N/A.

(20) **Certificate history**

Issue 0 - 250711; Initial certificate.