

CONFIRMATION

of Product Conformity (QAL1)

AMS designation: AC32e for NO, NO₂ and NO_x

Manufacturer: ENVEA
111, Boulevard Robespierre
78304 Poissy Cedex
France

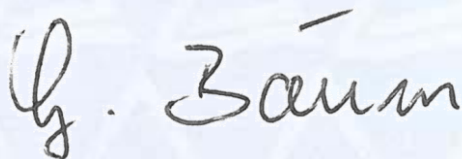
Test Laboratory: TÜV Rheinland Energy & Environment GmbH

**This is to certify that the AMS has been tested
and found to comply with the standards
VDI 4202-1 (2018), EN 14211 (2012), EN 14211 (2024)
EN 15267-1 (2009) and EN 15267-2 (2023).**

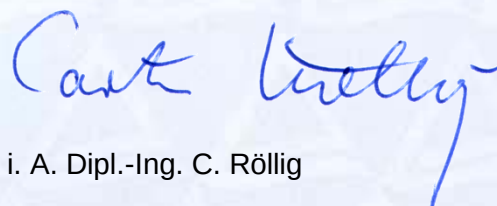
The AMS underwent independent expert testing and was accepted.
This confirmation is valid up to the publication of the certificate,
but no longer than 6 months from the date of issue
(this certificate contains 4 pages).

This confirmation is valid until: 31 December 2025

TÜV Rheinland Energy & Environment GmbH
Cologne, 4 July 2025



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51105 Köln

Test institute accredited to EN ISO/IEC 17025 by DAkkS (German Accreditation Body).
This accreditation is limited to the accreditation scope defined in the enclosure to certificate D-PL-11120-02-00.

confirmation:
4 July

Test report: 936/21233023/A of 13 October 2016 and Addendum
EuL/21264142/B of 7. February 2025

Expiry date: 31 December 2025

Approved application

The certified AMS is suitable for continuous ambient air monitoring of nitrogen oxides (stationary operation).

The suitability of the AMS for this application was assessed on the basis of a laboratory test and a three-month field test.

The AMS is approved for an ambient temperature range of +0 °C to +40 °C.

The notification of suitability of the AMS, performance testing and the uncertainty calculation have been effected on the basis of the regulations applicable at the time of testing. As changes in legal regulations are possible, any potential user should ensure that this AMS is suitable for monitoring the limit value relevant to the application.

Any potential user should ensure, in consultation with the manufacturer, that this AMS is suitable for the intended purpose.

Basis of the conformation

This certification is based on:

- Test report 936/21233023/A of 13 October 2016 by TÜV Rheinland Energy GmbH and Addendum EuL/21264142/B of 7. February 2025 by TÜV Rheinland Energy & Environment GmbH
- Suitability announced by the German Federal Environment Agency (UBA) as the relevant body
- The ongoing surveillance of the product and the manufacturing process

confirmation:
4 July

Notification on the announcements of the Federal Environment Agency of 22 February 2017 (BAnz AT 15.03.2017 B6, Chapter III number 1.1) and Federal Environment Agency of 2 April 2025 (Banz AT 19.05.2025 B3, Chapter IV, 89th communication).

The current software version for the AC32e*/Ac32e measuring system for NO, NO₂ and NO_x from ENVEA is as follows:

v1.3.a

From software version v1.3.a, the measuring system fulfils the requirements of EN 14211 (edition 2024). An addendum to the test report with the report number EuL/21264142/A can be viewed on the Internet at www.qal1.de.

Statement by TÜV Rheinland Energy & Environment GmbH dated 20 May 2025

confirmation:
4 July

Tested product

This conformation applies to automated measurement systems conforming to the following description:

The AC32e air quality monitoring system is a continuous nitrogen analyser. The measuring principle relies on the chemiluminescence method.

The main switch of the measuring system and a TFT-LCD colour display with background lighting and touch screen is located at the front of the instrument. This touch screen ensures operation of the AC 32e NO_x analyser. The AC 32e* version is identical to the AC 32e measuring system (apart from its front design), but it does not have a display. The AC 32e* measuring system is only operated via an external PC connected via Ethernet.

Fluid inputs and outputs as well as electrical connections are located on the rear side of the AMS.

The instrument is operated with an external vacuum pump.

In the analyser, sample gas flows to a solenoid valve unit via an inlet filter. At this point, the relevant inlet can be selected (sample, zero gas, test gas). The dryer between the dust filter and the solenoid valves allows the removal of all interferences from moisture.

The sample is sucked directly into the reaction chamber for the NO cycle and via the NO₂ → NO converter oven for the NO_x cycle.

The ozoniser generates the necessary ozone for measurements from ambient air. Dust is removed from the air sucked in before the latter is transported through a drier. At the outlet of the ozone generator, the ozone passes through cleaning before it reaches the reaction chamber inside the measuring module. The ozoniser chip ensures the energy supply of the ozone generator.

Furthermore, the dryer provides purge air for the conversion of the photomultiplier tube after flow through of the purge dryer filter.

The vacuum distributor connected to the external pump connects all internal elements which require sub-atmospheric pressure.