

# CONFIRMATION

## of Product Conformity (QAL1)

**Approved AMS:** Leak Alert 90 dust monitor

**Manufacturer:** ENVEA  
111, Boulevard Robespierre  
78304 Poissy Cedex  
France

**Test Institute::** TÜV Rheinland Energy & Environment GmbH

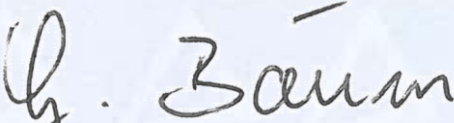
**This is to certify that the AMS has been tested  
according to the standards**

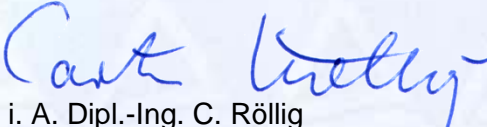
**EN 15267-1 (2009), EN 15267-2 (2023), EN 15859 (2010)  
as well as EN 14181 (2014).**

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 document contains 4 pages).

**This confirmation is valid until: 14 August 2024**

TÜV Rheinland Energy & Environment GmbH  
Cologne, 15 March 2024

  
i. V. Dipl.-Ing. G. Baum

  
i. A. Dipl.-Ing. C. Röllig

[www.umwelt-tuv.eu](http://www.umwelt-tuv.eu)  
tre@umwelt-tuv.eu  
Tel. +49 221 806-5200

TÜV Rheinland Energy & Environment GmbH  
Am Grauen Stein  
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:**  
15 February 2024

**Test Report:** EuL/21255874/A dated 29 September 2023

**Expiry date:** 14 August 2024

### **Approved application**

The tested AMS is suitable for use as a dust monitor for filter monitoring downstream of filter systems at plants Directive 2010/75/EC, chapter III (combustion plants / 13th BImSchV:2021), chapter IV (waste incineration plants / 17th BImSchV:2021), Directive 2015/2193/EC (44th BImSchV:2022), 30th BImSchV:2019, 27th BImSchV:2013 and TA Luft:2021. The measured ranges have been selected so as to ensure as broad a field of application as possible.

The suitability of the AMS for this application was assessed on the basis of a laboratory test and a 5 month field test at a waste incineration.

The AMS is approved for an ambient temperature range of -20 °C to 50 °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 provisions are possible, any potential user should ensure that this AMS is suitable for monitoring the measured values / emission limit values relevant to the application.

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

### **Note**

The legal regulations mentioned do not correspond to the current state of legislation in every case. Each user should, if necessary, in consultation with the competent authority, ensure that this AMS meets the legal requirements for the intended use. In addition, it cannot be ruled out that legal regulations governing the use of a measuring device for emission monitoring may change during the lifetime of the certificate.

### **Basis of the confirmation**

This confirmation is based on:

- Test report EuL/21255874/A dated 29 September 2023 issued by TÜV Rheinland Energy GmbH
- The ongoing surveillance of the product and the manufacturing process
- Expert testing and approval by an independent body

**Confirmation:**  
15 February 2024

**AMS designation:**

Leak Alert 90

**Manufacturer:**

ENVEA

**Field of application:**

Dust monitor for filter control behind dust collectors at plants requiring approval as well as plants according to the 27th BImSchV

**Measuring ranges during performance testing:**

Component	Certification range
Dust	0 – 100 % $\cong$ 4 – 20 mA $\cong$ 0 – 15 mg/m <sup>3</sup>

**Software version:**

3.1

**Restrictions:**

1. The measuring device can only be used if it can be ruled out that the dew point will fall below it.
2. The measuring device must not be operated behind electrostatic precipitators.
3. The measuring device cannot be used at fluctuating speeds below 8.3 m/s.

**Notes:**

1. The maintenance interval is four weeks.
2. The dust concentration is determined in the moist exhaust gas under operating conditions.
3. After a filter malfunction with a high dust content, the probe must be cleaned.

**Test Institute:**

TÜV Rheinland Energy GmbH, Cologne

Report No.: EuL/21255874/A dated 29 September 2023



**Confirmation:**  
15 February 2024

## **Tested product**

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

The Leak Alert 90 dust monitor operates according to the electrodynamic measuring principle, a further development of the triboelectric method. The direct current signal (DC signal) resulting from the collision of particles with the measuring head in the stack is filtered out electronically. An alternating current signal (AC signal) is produced as a result of charged particles flowing past the sensor rod and causing an interaction.

The dust signal is amplified, digitized and further processed at the measuring head. In constant processes with bag filters (where normally the particle charge characteristics are constant), the processed signal is proportional to the dust concentration.

The tested version of the Leak Alert 90 measuring device consists of the following individual components:

- Sensor consisting of the measuring lance (length 60 cm) with flanged electrical housing,
- PC-ME DUST TOOLS software

The Leak Alert 90 measuring device has a function for automatic checking of the zero and reference point. The sensors perform a cycle of three automatic self-tests: zero, range and short-circuit monitoring.

After conversion by the analog-to-digital converter (ADC), the digital signal is sent to the microprocessor. This signal is first converted into raw counts, and then further processed into a message signal. The front-end amplifier has a switchable gain setting.