

# CERTIFICATE

## of Product Conformity (QAL1)

Certificate No: 0000033596\_03

**Certified AMS:** AMESA-D for Longterm-Sampling

**Manufacturer:** ENVEA GmbH  
Benzstraße 11  
61352 Bad Homburg  
Germany

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

**This is to certify that the AMS has been tested  
and found to comply with the standards  
Uniform practice in monitoring emissions (2017),  
EN 15267-1 (2009), EN 15267-2 (2023).**

Certification is awarded in respect of the conditions stated in this certificate  
(this certificate contains 11 pages).  
The present certificate replaces certificate 0000033596\_02 dated 1 July 2020.



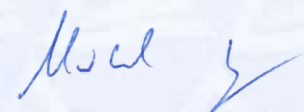
Suitability Tested  
EN 15267  
QAL1 Certified  
Regular  
Surveillance

www.tuv.com  
ID 0000033596

Publication in the German Federal Gazette  
(BAnz) of 1 April 2014

German Environment Agency

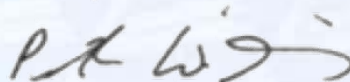
Dessau, 27 June 2025



Dr. Marcel Langner  
Head of Section II 4

This certificate will expire on:  
30 June 2030

TÜV Rheinland Energy &  
Environment GmbH  
Cologne, 26 June 2025



ppa. Dr. Peter Wilbring

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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 the certificate D-PL-11120-02-00.

\* Uniform practice in monitoring emissions

- Circular from the Federal Environment Ministry of 23-01-2017 - IG I 2 - 45053/5

**Test report:** 936/2122445/A dated 9 October 2013  
**Initial certification:** 1 April 2014  
**Expiry date:** 30 June 2030  
**Certificate:** Renewal (of previous certificate 0000033596\_02 of  
1 July 2020 valid until 30 June 2025)  
**Publication:** BAnz AT 01.04.2014 B12, chapter III No. 1.1

### Approved application

The tested long-term sampling system is suitable for sampling of dioxins and furans. 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 fourteen month field test at two waste incinerators.

The AMS is approved for an ambient temperature range of +5 °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 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 installation at which it will be installed.

### Note

The legal regulations mentioned correspond to the current state of legislation during certification. 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 certification

This certification is based on:

- Test report 936/2122445/A dated 9 October 2013 of TÜV Rheinland Energie und Umwelt GmbH
- Suitability announced by the German Federal Environment Agency (UBA) as the relevant body
- The ongoing surveillance of the product and the manufacturing process

Publication in the German Federal Gazette: BAnz AT 01.04.2014 B12, chapter III No. 1.1,  
Announcement by UBA dated 27 February 2014:

**AMS designation:**

AMESA-D long-term sampling of dioxins/furans

**Manufacturer:**

ENVEA Deutschland, Bad Homburg

**Field of application:**

Continuous sampling of dioxins/furans

**Measuring ranges during the performance test:**

Component	Certification range	Unit
Velocity	1.1 - 30	m/s
Dioxine*	up to 0.5	ng/m <sup>3</sup> TEQ

\*with 260 m<sup>3</sup> flue gas to 70 g XAD-2

**Software version:**

P86.017.0

**Restriction:**

The performance criterion as related to losses during sampling was not fulfilled in the 6-hour comparison measurements. Therefore, the probe tube shall be rinsed before and after the comparison measurements and the result of the analysis of the rinsing solution after measurement shall be added to the analysed value.

**Note:**

The integrated velocity measuring system cannot be used in saturated exhaust gas.

**Test Institute:** TÜV Rheinland Energie und Umwelt GmbH, Cologne

Report No.: 936/2122445/A dated 9 October 2013



Publication in the German Federal Gazette: BAnz AT 26.08.2015 B4, Chap. V notification 22,  
Announcement by UBA dated 22 July 2015:

**22 Notification as regards Federal Environment Agency (UBA) notice  
of 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1)**

The current software version for the AMESA-D for dioxins / furans long-term  
sampling system, manufactured by Environnement S.A. Deutschland, is:  
P86.019.9

Statement by TÜV Rheinland Energie und Umwelt GmbH of 25 March 2015

Publication in the German Federal Gazette: BAnz AT 01.08.2016 B11, Chap. V notification 4,  
Announcement by UBA dated 14 July 2016:

**4 Notification as regards Federal Environmental Agency (UBA) notices  
of 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and  
of 22 July 2015 (BAnz AT 26.08.2015 B4 chapter V notification 22)**

The current software version of the AMESA-D long-term sampling system for  
dioxins/furans manufactured by Environnement S.A. Deutschland is:  
P86.020.1

The 10A power supply type QUINT-PS-100-240AC/24DC/10-2938604 which has  
been used so far will be replaced by the QUINT-PS/1AC/24DC/10-2866763 model in  
the future.

The 2.5A power supply type QUINT-PS-100-240AC/24DC/2.5-2938578 which has  
been used so far will be replaced by the QUINT-PS/1AC/24DC/3.5-2866747 model in  
the future.

Statement by TÜV Rheinland Energie und Umwelt GmbH of 28 February 2016

Publication in the German Federal Gazette: BAnz AT 31.07.2017 B12, Chap. II  
notification 15, Announcement by UBA dated 13 July 2017:

**15 Notification as regards Federal Environment Agency notices  
of 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and  
of 14 July 2016 (BAnz AT 01.08.2016 B11, chapter V notification 4)**

The current software version of the AMESA-D long-term sampling system for  
dioxins/furans manufactured by Environnement S.A. Deutschland is:  
P86.020.6

The Hitachi L200 frequency converter used so far has now been replaced by the  
successor model Hitachi WL200.

Statement by TÜV Rheinland Energy GmbH of 5 January 2017

Publication in the German Federal Gazette: BAnz AT 17.07.2018 B9, Chap. III notification 11, Announcement by UBA dated 3 July 2018:

**11 Notification as regards Federal Environment Agency (UBA) notices dated 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and dated 13 July 2017 (BAnz AT 31.07.2017 B12, chapter II notification 15)**

The current software version of the AMESA-D long-term sampling system for dioxins/furans manufactured by Environnement S.A. Deutschland is:  
P86.020.7

The CP-Single pump manufactured by Bühler Technologies replaces the peristaltic pump, type SP04 G/1, by the same manufacturer used for condensate draining so far.

Statement by TÜV Rheinland Energy GmbH of 20 February 2018

Publication in the German Federal Gazette: BAnz AT 22.07.2019 B8, Chap. V notification 3, Announcement by UBA dated 28 June 2019:

**3 Notification as regards Federal Environment Agency (UBA) notices of 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and of 13 July 2017 (BAnz AT 31.07.2017 B12, chapter II notification 15)**

The company name has changed from Environnement S.A. Deutschland to ENVEA Deutschland.

The latest software version of the AMESA-D long-term sampling system for dioxins/furans manufactured by ENVEA Deutschland is:  
P86.021.2

In addition to this version, the following intermediate versions are also valid:  
P86.020.8, P86.020.9, P86.021.0, P86.021.1

Statement by TÜV Rheinland Energy GmbH of 6 March 2019



Publication in the German Federal Gazette: BAnz AT 31.07.2020 B10, Chap. II notification 3, Announcement by UBA dated 27 May 2020:

**3 Notification as regards Federal Environment Agency (UBA) notices of 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and of 13 July 2017 (BAnz AT 31.07.2017 B12, chapter II, notification 15)**

The latest software version of the AMESA-D long-term sampling system for dioxins/furans manufactured by ENVEA Deutschland is:

P86.021.3

The holder for the fine-dioxin filter has been revised. The filter is now placed inside a reusable titanium holder.

Statement by TÜV Rheinland Energy GmbH of 20 February 2018

Publication in the German Federal Gazette: BAnz AT 03.05.2021 B9, Chap. III notification 14, Announcement by UBA dated 31 March 2021:

**14 Notification as regards Federal Environment Agency (UBA) notices of 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and of 27 May 2020 (BAnz AT 31.07.2020 B10, chapter II notification 3)**

The AMESA-D measuring system for long-term sampling of dioxins and furans from ENVEA GmbH is now equipped with a new control system and a new operating unit (HMI electronics).

The latest software version of the measuring system AMESA-D is:

P94.001.4

The company name was changed from ENVEA Deutschland to ENVEA GmbH.

Statement by TÜV Rheinland Energy GmbH of 22 September 2020

Publication in the German Federal Gazette: BAnz AT 05.08.2021 B5, Chap. IV notification 32, Announcement by UBA dated 29 June 2021:

**32 Notification as regards Federal Environment Agency (UBA) notices of 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and of 31 March 2021 (BAnz AT 03.05.2021 B9, chapter III notification 14)**

The AMESA-D measuring system for long-term sampling of dioxins and furans manufactured by ENVEA GmbH has new software.

The latest software version for the long-term sampling system AMESA-D is:

P94.002.0

In addition, the interim versions P94.001.5, P94.001.7, P94.001.8 and P94.001.9 are also available for the measuring system.

Statement by TÜV Rheinland Energy GmbH of 03 May 2021

Publication in the German Federal Gazette: BAnz AT 28.07.2022 B4, Chap. III  
notification 10, Announcement by UBA dated 28 June 2022:

**10 Notification as regards Federal Environment Agency (UBA) notices  
of 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and  
of 29 June 2021 (BAnz AT 05.08.2021 B5, chapter IV notification 32)**

The measuring system AMESA-D for long-term sampling of dioxins and furans of the  
company ENVEA GmbH has a new software.

The current software version of the control cabinet for the long-term sampling system  
AMESA-D is:

P94.002.7

In addition, the intermediate versions P94.002.1; P94.002.2; P94.002.3; P94.002.4;  
P94.002.5 and P94.002.6 are available.

The current software version of the touch panel is:

2.4.3.0.

Statement by TÜV Rheinland Energy GmbH of 16 February 2022

Publication in the German Federal Gazette: BAnz AT 10.05.2024 B7, Chap. V notification 11,  
Announcement by UBA dated 19 March 2024:

**11 Notification as regards Federal Environment Agency (UBA) notices  
of 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and  
of 28 June 2022 (BAnz AT 28.07.2022 B4, chapter III notification 10)**

The current software versions for the AMESA-D measuring system for long-term  
sampling of dioxins and furans from ENVEA GmbH are as follows:

Control cabinet: P94.002.9

Touch panel: 2.4.8.0

The intermediate versions P94.002.8 (control cabinet) and 2.4.6.0 (touch panel) can  
also be used.

The current software version for the AMESA-D measuring system with the old control  
unit and the old operating unit for long-term sampling of dioxins and furans from  
ENVEA GmbH is

Control unit: P.86.022.2

The intermediate versions P86.021.4, P86.021.5, P86.021.6, P86.021.7, P86.021.8,  
P86.022.0 and P86.022.1 can also be used.

Statement by TÜV Rheinland Energy GmbH of 27 September 2023



Publication in the German Federal Gazette: BAnz AT 19.05.2025 B3, Chap. IV  
notification 25, Announcement by UBA dated 2 April 2025:

**25 Notification as regards Federal Environment Agency (UBA) notices of 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and of 19 March 2024 (BAnz AT 10.05.2024 B7, chapter V notification 11)**

The current software versions of the AMESA-D measuring system for long-term sampling of dioxins and furans from ENVEA GmbH are as follows:

Control cabinet: P94.003.1  
Touch panel: 2.4.9.0

The intermediate version P94.003.0 can also be used for the control cabinet. The current software version of the AMESA-D measuring system with old control unit and old operating unit for long-term sampling of dioxins and furans from ENVEA GmbH is as follows:

Control unit: P.86.022.2

Statement issued by TÜV Rheinland Energy & Environment GmbH dated 09 October 2024



**Certified product**

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

The AMESA-D dioxin/furan monitoring system isokinetically samples a partial flow of the flue gas. Dioxins and furans are adsorbed on a replaceable cartridge filled with adsorber resin.

AMESA-D is fully automatic and saves all necessary data internally. The data can be transferred to a USB stick using an USB interface. Data transfer is also possible via internet.

The amount of dioxins/furans (PCDD/PCDF) over the variable period of 4 hours to 6 weeks is determined in an accredited laboratory.

The AMESA D system comprises:

- a cooled glass probe (during performance testing 2 materials were tested but only glass proved to be suitable at the field test location) with velocity measurement (velocity pressure) and temperature measurement
- a cartridge box with adsorber cartridge and process computer to measurement data recording and control
- a measuring cabinet with:
  - sample gas cooler with condensation separator
  - mass flow meter
  - Gas meter
  - Pump
- a process computer controlling the entire system and recording measurement data

**General notes**

This certificate is based upon the equipment tested. The manufacturer is responsible for ensuring that on-going production complies with the requirements of the EN 15267. The manufacturer is required to maintain an approved quality management system controlling the manufacture of the certified product. Both the product and the quality management systems shall be subject to regular surveillance.

If a product of the current production does not conform to the certified product, TÜV Rheinland Energy & Environment GmbH must be notified at the address given on page 1.

A certification mark with an ID-Number that is specific to the certified product is presented on page 1 of this certificate. This certification mark may be applied to the product or used in advertising materials for the certified product.

This document as well as the certification mark remains property of TÜV Rheinland Energy & Environment GmbH. With revocation of the publication the certificate loses its validity. After the expiration of the certificate and on requests of the TÜV Rheinland Energy & Environment GmbH this document shall be returned and the certificate mark must not be employed anymore.

The relevant version of this certificate and its expiration is also accessible on the internet: [qal1.de](http://qal1.de).

### History of documents

Certification of AMESA-D is based on the documents listed below and the regular, continuous monitoring of the Quality Management System of the manufacturer:

#### Initial certification according to EN 15267

Certificate No. 0000033596\_00: 29 April 2014  
Expiry date of the certificate: 31 March 2019  
Test report: 936/2122445/A dated 9 October 2013  
TÜV Rheinland Energie und Umwelt GmbH  
Publication: BAnz AT 01.04.2014 B12, chapter III number 1.1  
UBA announcement dated 27 February 2014

#### Notifications

Statement issued by TÜV Rheinland Energie und Umwelt GmbH dated 25 March 2015  
Publication: BAnz AT 26.08.2015 B4, chapter V notification 22  
UBA announcement dated 22 July 2015  
(Software changes)

Statement issued by TÜV Rheinland Energie und Umwelt GmbH dated 28 February 2016  
Publication: BAnz AT 01.08.2016 B11, chapter V notification 4  
UBA announcement dated 14 July 2016  
(Soft- and hardware changes)

Statement issued by TÜV Rheinland Energy GmbH dated 5 January 2017  
Publication: BAnz AT 31.07.2017 B12, chapter II notification 15  
UBA announcement dated 13 July 2017  
(Soft- and hardware changes)

Statement issued by TÜV Rheinland Energy GmbH dated 20 February 2018  
Publication: BAnz AT 17.07.2018 B9, chapter III notification 11  
UBA announcement dated 3 July 2018  
(Soft- and hardware changes)

#### Renewal of certificates

Certificate No. 0000033596\_01: 1 April 2019  
Expiry date of the certificate: 30 June 2020

#### Notifications

Statement issued by TÜV Rheinland Energy GmbH dated 6 March 2019  
Publication: BAnz AT 22.07.2019 B8, chapter V notification 3  
UBA announcement dated 28 June 2019  
(New manufacturer name and software changes)

#### Renewal of certificates

Certificate No. 0000033596\_02: 1 July 2020  
Expiry date of the certificate: 30 June 2025

#### Notifications

Statement issued by TÜV Rheinland Energy GmbH dated 20 February 2018  
Publication: BAnz AT 31.07.2020 B10, chapter II notification 3  
UBA announcement dated 27 May 2020  
(Soft- and hardware changes)



Statement issued by TÜV Rheinland Energy GmbH dated 22 September 2020  
Publication: BAnz AT 03.05.2021 B9, chapter III notification 14  
UBA announcement dated 31 March 2021  
(Soft- and hardware changes and Name change Manufacturer)

Statement issued by TÜV Rheinland Energy GmbH dated 3 May 2021  
Publication: BAnz AT 05.08.2021 B5, chapter IV notification 32  
UBA announcement dated 29 June 2021  
(Software change)

Statement issued by TÜV Rheinland Energy GmbH dated 16 February 2022  
Publication: BAnz AT 28.07.2022 B4, chapter III notification 10  
UBA announcement dated 28 June 2022  
(Software changes)

Statement issued by TÜV Rheinland Energy GmbH dated 27 September 2023  
Publication: BAnz AT 10.05.2024 B7, chapter V notification 11  
UBA announcement dated 19 March 2024  
(Software changes)

**Renewal of certificates**

Certificate No. 0000033596\_03: 27 June 2025  
Expiry date of the certificate: 30 June 2030