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CONFIRMATION

of Product Conformity (QAL1)

Sampling device:	PNS for PM_{10} or $PM_{2,5}$
Manufacturer:	Comde-Derenda GmbH Kieler Straße 9 14532 Stahnsdorf Germany
Test Institute::	TÜV Rheinland Energy & Environment GmbH

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

EN 12341 (2023),
as well as 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 9 months from the date of issue
(this document contains 5 pages).

This confirmation is valid until: 31 December 2026

TÜV Rheinland Energy & Environment GmbH
Cologne, 10 April 2026

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

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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.

Test Report:	EuL/21265113/A dated 1 October 2025
Expiry date:	31 December 2026

Approved application
The tested sampling device is suitable for continuous sampling of PM_{10} or $PM_{2,5}$ for subsequent gravimetric determination.

The suitability for these applications was tested on the basis of a laboratory test and a one month continuous field test.

The sampling device is approved for the ambient temperature range of -20° to 50°C.

The notification of suitability of the sampling device and performance testing has 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 sampling device is suitable for monitoring the measured values relevant to the application.

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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/21265113/A dated 1 October 2025 issued by TÜV Rheinland Energy & Environment GmbH
- The ongoing surveillance of the product and the manufacturing process
- Expert testing and approval by an independent body

Sampling device:
PNS for suspended particulate matter $PM_{2,5}$ or PM_{10}

Manufacturer:
Comde-Derenda GmbH, Stahnsdorf, Germany

Field of application:
Sampling device for the gravimetric determination of suspended particulate matter $PM_{2.5}$ or PM_{10} in accordance with standard DIN EN 12341 (2023)

Software version:
2.61.001

Restrictions:
none

Notes:

1. The test covers the device versions PNS T-DM (tower version), PNS DMC (rack version) and PNS DM (split version).
2. The PNS T-DM and PNS-DM device versions can be used either with a small pump (4 m³/h, Type VT4.4, manufacturer Becker), a medium-sized pump (6 m³/h, Type VTE6, manufacturer Thomas Gardner Denver) or a large pump (8 m³/h, Type VT4.8, manufacturer Becker), as well as with a Peltier cooling unit (Variant 50 (small) or Variant 100 (large)).
3. The PNS DMC unit version can be equipped with either a small pump (4 m³/h, type VT4.4, manufacturer Becker), a medium-sized pump (6 m³/h, type VTE6, manufacturer Thomas Gardner Denver) or a large pump (8 m³/h, type VT4.8, manufacturer Becker).
4. With the exception of the test for the PNS DMC unit version, the test was carried out with active cooling of the filter magazine for the loaded filters.
5. The test report on the suitability test is available online at www.qal1.de.

Test Institute: TÜV Rheinland Energy & Environment GmbH, Cologne
Report No.: EuL/21265113/A dated 1 October 2025

Tested product

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

The PNS sampling device is an automatic, sequential low-volume sampler designed for dust sampling on membrane or fibre filters. The system includes a sampling line and can be operated with either a PM_{10} sampling inlet or a $PM_{2.5}$ sampling inlet. Ambient air is drawn in via the respective sampling inlet for PM_{10} or $PM_{2.5}$ using a pump. The dust-laden air is then separated by a filter. After sampling, the dust collected on the filters is determined by external gravimetric weighing in accordance with EN 12341. In addition, the filters can be used for further analytical procedures such as the detection of heavy metals.

The PNS sampling device is available in the following configurations:

- PNS T-DM (Tower version, all components in a single housing, suitable for indoor and outdoor installation)
- PNS DMC (Rack version, all components in a single housing, suitable for indoor installation in a 19-inch rack
- PNS DM (split version, combination of small filter unit (LVS or MVS) and filter changer AFC-DM, suitable for indoor and outdoor installation.

Furthermore, the PNS T-DM and PNS-DM models can be equipped with either a small pump (4 m³/h, Type VT4.4, manufacturer Becker), a medium-sized pump (6 m³/h, Type VTE6, manufacturer Thomas Gardner Denver) or a large pump (8 m³/h, Type VT4.8, manufacturer Becker), as well as with a Peltier cooling unit (Variant 50 (small) or Variant 100 (large)). The PNS DMC version can also be equipped with either a small pump (4 m³/h, type VT4.4, manufacturer Becker), a medium-sized pump (6 m³/h, type VTE6, manufacturer Thomas Gardner Denver) or a large pump (8 m³/h, type VT4.8, manufacturer Becker).

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Technical data and operating parameters (manufacturer's specifications)

	PNS T-DM (Tower-Version)	PNS DMC (Rack-Version)	PNS DM (Split-Version)
Sampling unit			
Dimensions in mm	510 x 330 x 1100	483 x 361 x 510	300 x 250 x 450 (LVS/MVS) 440 x 340 x 760 (AFC-DM)
Weight in kg	52 - 59	25,5 – 27,5	31 kg – 33
Sampling pump	4 m³/h, Typ VT4.4, manufacturer Becker,		
	6 m³/h, Typ VTE6, manufacturer Thomas Gardner Denver,		
	8 m³/h, Typ VT4.8, manufacturer Becker		
Sampling tube	up to 3000 mm (800 mm during the test)		
Sampling head	SH 10-47 (PM_{10})		
	SH 2.5-47 ($PM_{2,5}$)		
Power supply	230 VAC bei 50/60 Hz		
Power consumption	300 – 470 W	240 – 300 W	240 – 300 W
Installation conditions			
Temperature	-20 to +50 °C		
Humidity	0 - 100% rH		
Sampling line	1		
Sample flow rate	2,3 m³/h = 38,33 l/min constant		
Sampling tube	Aluminium, anodised and internally polished		
Filter management			
Filter type	Flat filter, d = 47 mm		
Filter holde	POM		
Filter capacity	18, 24 oder 29		
Conditioning of filters after sampling	Optional	Not available	Optional
Cooling unit	Variante 50 (small) Variante 100 (large)		Variante 50 (small) Variante 100 (large)
Data logging			
Interval	15 min – 59 h 59 min (15 min during the test)		
Operating parameters	Flow rate (m³/h i.B. and m³/h i.N.)		
	Volume (m³ i.B. and m³ i.N.)		
	Critical nozzle temperature		
	Outside temperature		
	Relative humiditye		
	Ambient pressure		
	Filter differential pressure		
	Filter temperature		
	Filter housing temperature		
	Error code		
Interfaces	RS232, SD card,		
	Optional LTE Modem		