

PRODUCT CONFORMITY CERTIFICATE

This is to certify that the

AccuFlo QAL

Manufactured by:

**S.K.I Schlegel & Kremer
Industrieautomation GmbH**

Hanns-Martin-Schleyer-Straße 22
41199 Mönchengladbach
Germany

has been assessed by CSA Group
and for the conditions stated on this certificate complies with:

Environment Agency Guidance
“MCERTS for stack emissions monitoring equipment at industrial installations”
- Continuous emissions monitoring systems(CEMS)
Published 20 October 2020
EN 15267-1:2009, EN15267-2:2009, EN 15267-3:2007
& QAL 1 as defined in EN 14181: 2014

Certification range: Supplementary ranges:

Exhaust gas velocity	2 - 20 m/s	2 - 40 m/s 2 - 60 m/s
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Project number: 80148194
Certificate number: CSA MC120218/02
Initial certification: 18 December 2012
This certificate issued: 8 December 2022
Renewal date: 17 December 2027



Andrew Young
Environmental Team Manager

MCERTS is operated on behalf of the Environment Agency by

CSA Group Testing UK Ltd

Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
Tel: +44 (0)1244 670 900



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Certificate Contents

Approved Site Application.....	2
Basis of Certification	2
Certified Performance	3
Description.....	5
General Notes	5

Approved Site Application

Any potential user should ensure, in consultation with the manufacturer, that the monitoring system is suitable for the intended application. For general guidance on monitoring techniques refer to the Environment Agency Monitoring Technical Guidance Notes available at www.mcerts.net

The field test was carried out between 22 May 2012 and 17 July 2013 in the exhaust gas of a municipal waste incinerator using two complete identical instruments.

Basis of Certification

This certification is based on the following test report(s) and on CSA Group's assessment and ongoing surveillance of the product and the manufacturing process:

TÜV Rheinland, Report No.: 936/21219344/A, Cologne, 8th October 2012

TÜV Rheinland, Report No.: 936/21219344/B, Cologne, 1st October 2013

Product Certified

The AccuFlo QAL measurement system consists of the following parts:

- Probes - SDF 22/32/50 (all fixed width and variable length)
- Transducer (Siemens SITRANS P, DS III or S.K.I. AccuFlo-P, DS III)
- Evaluation electronics (µFLOW 100LSE).

This certificate applies to all instruments fitted with software version LSE-QAL-2.10 (serial number 3680 (µFLOW 100LSE), N1-C329-9024037 (SITRANS P), 12048607 (probe tube) onwards)

Amendments to product certified

MC120218/02, dated 8 December 2022

Hardware - the addition of:

- Probe - SDF 50+ variable width and length
- Transducer (Siemens SITRANS P320/S.K.I. AccuP320)
- Evaluation electronics (AccuMind QAL).

Software

- The latest software version of the AccuFlo QAL measuring system manufactured S.K.I Schlegel Kremer Industrieautomation GmbH is: LSE-QAL-1.0.4

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Certified Performance

The instrument was evaluated for use under the following conditions:

Ambient Temperature Range: -20°C to +50°C
Instrument IP rating: IP65

Test	Results expressed as % of the certification range				Other results	MCERTS specification
	<0.5	<1	<2	<5		
Response time					10s	<60s
Repeatability standard deviation at zero point	0.1					<2.0%
Repeatability standard deviation at reference point	0.1					<2.0%
Lack-of-fit						
0 to 18 m/s		0.7				<3.0%
0 to 36 m/s	0.3					<3.0%
0 to 54 m/s	0.2					<3.0%
Influence of ambient temperature zero point (-20°C to +50°C)	0.3					<5.0%
Influence of ambient temperature reference point (-20°C to +50°C)			1.0			<5.0%
Influence of voltage variations (190V to 250V)	0.2					<2.0%
Measurement uncertainty					Guidance - at least 25% below max permissible uncertainty 3.7%	<15%

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Test	Results expressed as % of the certification range				Other results	MCERTS specification
	<0.5	<1	<2	<5		
Calibration function (field)					Note 1 0.995	>0.90
Response time (field)					10s	<60s
Lack-of-fit (field)		0.5				<3%
Maintenance interval					Note 2 3 months	>8 days
Change in zero point over maintenance interval	0.4					<2.0%
Change in reference point over maintenance interval		1.1				<4.0%
Availability					99.7%	>95%
Reproducibility				2.7		<3.3%

Note 1: Calibration function calculated in accordance with EN 16911-2

Note 2: Three monthly maintenance:

- Visual inspection at regular intervals
- Zero and span point check by means of external pressure application
- Always refer to the manufacturer recommendations
- In the event of malfunction or interruption of operation, especially at the dedusting system of the plant, the probe shall be checked for contamination.

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Description

The AccuFlo QAL is an in-situ differential pressure-based flow measurement device. It consists of an SDF-sensor, a differential pressure transmitter and an evaluation unit. It can be delivered in different designs (such as direct and separate mounting of the differential pressure transmitter).

Depending on the chosen sensor material the instrument can be used to monitor aggressive and high temperature flue gases.

It is available as part stream measurement, as one cross duct measuring path and as two cross duct measuring path version. Therefore, it offers an optimal solution for all measuring modes described in chapter 8.3 of the EN ISO 16911-2.

General Notes

1. This certificate is based upon the equipment tested. The Manufacturer is responsible for ensuring that on-going production complies with the standard(s) and performance criteria defined in this certificate. 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 system shall be subject to regular surveillance according to 'Regulations Applicable to the Holders of CSA Group Testing UK Ltd Certificates'.
2. The design of the product certified is held and maintained by TÜV Rheinland for certificate No. Sira MC120218.
3. If a certified product is found not to comply, CSA Group should be notified immediately at the address shown on this certificate.
4. The certification marks that can be applied to the product or used in publicity material are defined in 'Regulations Applicable to the Holders of CSA Group Testing UK Ltd Certificates'.
5. This document remains the property of CSA Group and shall be returned when requested by CSA Group.

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