TÜVRheinland®
Genau. Richtig.

CONFIRMATION

of Product Conformity (QAL1)

AMS designation:	FIDAMAT 6 MEASURING SYSTEM for TOC
Manufacturer:	SIEMENS AG Östliche Rheinbrückenstraße 50 76187 Karlsruhe Germany
Test Laboratory:	TÜV Rheinland Energy GmbH

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

EN 15267-1: 2009, EN 15267-2: 2009, EN 15267-3: 2007 and EN 14181: 2015

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)

Expiry date: 10 December 2018

TÜV Rheinland Energy GmbH
Cologne, 11 June 2018

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Test institute accredited to EN ISO/IEC 17025:2005 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.

Test Report:	936/21235670/A dated 12 December 2017
Expiry date:	10 December 2018

Approved application
The tested AMS is suitable for use at combustion plants according to Directive 2010/75/EU, chapter III (13th BImSchV), the 30th and 31st BImSchV and TA Luft. The measured ranges have been selected so as to cater for 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 three-months field test at a waste incineration plant.

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 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.

Basis of the confirmation
This confirmation is based on:

- Test report 936/21235670/A dated 12 December 2017
  issued by TÜV Rheinland Energy GmbH
- The ongoing surveillance of the product and the manufacturing process
- Expert testing and approval by an independent body

AMS designation:
FIDAMAT 6 MEASURING SYSTEM for TOC

Manufacturer:
SIEMENS AG, Karlsruhe

Field of application:
For plants requiring official approval according to 13th BImSchV, 30th BImSchV, 31st BImSchV and TA Luft

Measuring ranges during performance testing:

Component	Certification range	Supplementary measuring ranges			Unit
TOC	0–15	0–50	0–150	0–500	mg/m³

Software version:
1.3.6

Restriction:
To operate this measuring system, an oxygen analyser is required at the same measurement point to compensate for cross-sensitivity. That oxygen analyser must be certified to EN 15267 and operated in accordance with EN 14181.

Note:
The maintenance interval is four weeks.

Test Report:
TÜV Rheinland Energy GmbH, Cologne
Report no.: 936/21235670/A dated 12 December 2017

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

The AMS is a flame ionisation detector (FID).

The measuring system is a flame ionisation detector (FID). The conductivity of a hydrogen flame in which the sample gas is burned serves as a physical indicator. Sample gas is ionised in that flame. Ions thus released are collected and their number determined. The quantity of detected ions serves as an indicator for the number of organic carbon atoms present in the sample gas.

The tested AMS consist of:
FIDAMAT 6 analyser
Analyser cabinet
Heated sample probe (180 °C) c/w controller, M&C SP2000
Heated line (180 °C), max 50 m, c/w controller, inner liner made of Teflon
An integrated diaphragm pump supplies the sample gas to the FIDAMAT 6 measuring system via a heated line and an additional filter, and to the flame ionisation detector via a clog-resistant quartz glass limiter. Inside the detector, hydrocarbons present in the sample gas are burned in an oxygen-hydrogen flame. Organic hydrocarbons are ionised during the combustion process.
Ions thus released are converted into an ion current as a result of the polarisation potential between the electrodes and are measured with the help of a highly-sensitive amplifier. The measured current is proportional to the number of organic C atoms of the hydrocarbons present in the sample gas.

- A pressure controller keeps the hydrogen pressure at a constant level. A dove-tailed system consisting of a pump, capillaries and combustion-air pressure control ensures constant sample gas pressure.