

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** FM17US0040X
3. **Equipment:** GasLab Q2
(Type Reference and Name) Gas Analyzer
4. **Name of Listing Company:** Elster GmbH
5. **Address of Listing Company:** Steinern Straße 19-21
Mainz-Kastel, 55252
Germany
6. The examination and test results are recorded in confidential report number:

3060329 dated 18th June 2017
7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600: 2018, FM Class 3810: 2005, ANSI/ISA 60079-0: 2013, ANSI/UL 60079-1: 2015
8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
10. **Equipment Ratings:**

Explosionproof for Class I, Division 2, Groups A, B, C, D; Flameproof for Class I, Zone 1 AEx db IIC Gb; hazardous (classified) locations with a T4 temperature class.

Certificate issued by:

J.E. Marquedant
VP, Manager - Electrical Systems

3 June 2019

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

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SCHEDULE



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11. The marking of the equipment shall include:

Class I Division 2, Groups A, B, C, D; T4 Ta = -25°C to +55°C

Class I, Zone 1, AEx db IIC T4 Gb Ta = -25°C to +55°C

12. **Description of Equipment:**

General - The GasLab Q2 is a flame-less measurement device for determining the nature of natural gases and optional natural gas-like burnable gases. Typical applications are in the process control industry and billing in the energy sector. It is a compact system including direct operation and display on the device. The measuring principle is based on a correlative method. The properties of the gas are measured via special sensors. With a special analysis algorithm, the specific gas properties are directly determined.

Construction – The GasLab Q2 Gas Analyzer consists of two Aluminum flameproof compartments which are bolted together and connected via an electrical line bushing. The upper compartment contains all customer connections and has a volume of about 1 litre (internal diameter ±160 mm height ±50 mm) connections. It is provided with four M20 X 1.5 entries (optional ½ inch NPT entries). The lower compartment contains the electronics for processing, Human Machine Interface (HMI) the sensors, and the gas stream selection, and is about ±3.1 litre (±2.5 filled, internal diameter ±160 mm height ±155 mm). Ex db breather elements are provided in both of the compartments.

Ratings – The GasLab Q2 Gas Analyzer operates at 24 Vdc (96 W). It is rated for use in an ambient temperature range of -25°C to +55°C.

GasLab Q2 Gas Analyzer

13. **Specific Conditions of Use:**

1. Contact manufacturer for flameproof joint details if repair is required.
2. For painted models, the housing may only be cleaned with a moist cloth because of potential static charging.

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
18 th June 2017	Original Issue.

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3 rd June 2019	<p>Supplement 1: Report Reference: PR452998 supplements 3rd June 2019 Description of Change: 1) Updated the year on FM 3600 standard to 2018 2) Qualified the minor changes to the equipment.</p>
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