# **CERTIFICATE OF CONFORMITY**



1. HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS

2. Certificate No: FM17CA0027X

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:

CSA C22.2 No. 0.4: 2013, CSA C22.2 No. 0.5: 2012, C22.2 No. 61010-1: 2012, CAN/CSA-C22.2 No. 60079-0:2015, CAN/CSA-C22.2 No. 60079-1:2016

- 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:

Flameproof Ex db IIC T4 Gb and Explosionproof for Class I, Division 2 per CEC J18-150 hazardous locations with a T4 temperature class.

Certificate issued by:

JE. Marquedant

VP, Manager - Electrical Systems

3 June 2019

Date

To verify the availability of the Approved product, please refer to <a href="www.approvalguide.com">www.approvalguide.com</a>

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

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: <a href="mailto:information@fmapprovals.com">information@fmapprovals.com</a> <a href="mailto:www.fmapprovals.com">www.fmapprovals.com</a> <a href="mai

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# **SCHEDULE**



Canadian Certificate Of Conformity No: FM17CA0027X

## 11. The marking of the equipment shall include:

Ex db IIC T4 Gb Ta = -25°C to +55°C Class I Division 2 per CEC J18-150

# 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  $\pm 160$  mm height  $\pm 50$  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  $\pm 3.1$  litre ( $\pm 2.5$  filled, internal diameter  $\pm 160$  mm height  $\pm 155$  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 Canadian Certification Scheme.

# 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 <sup>th</sup> June 2017	Original Issue.

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# **SCHEDULE**



Member of the FM Global Group

Canadian Certificate Of Conformity No: FM17CA0027X

3rd June 2019 Supplement 1: Report Referen

Report Reference: PR452998 dated 3rd June 2019

Description of Change: Qualified the minor changes to the equipment.

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