

Gas analyzers EL3060 The specialists for hazardous areas

Compact and combinable - the analyzers E

ABB Analytical possesses decades of experience in the area of explosion protection. The EL3060 series unifies this competence with the approved measuring technique. The completely flameproof enclosure of the EL3060 is in accordance with all the requirements of Category II 2G and can be used, due to its high safety standards, in plants with potentially explosive gas atmospheres in Zone 1 and Zone 2.



Gas analyzers EL3060 – the advantages to you:

Compactly built

The EL3060 series is convincingly compactly built. One device is made up of the flameproof enclosed control unit and one or two analyzers from the successful product line Advance Optima.

- Paramagnetic oxygen analyzer or thermal conductivity analyzer – integrated into the housing of the control unit
- Infrared photometer, built into a separate flame-proof enclosure which is connected to the control unit for data transfer and power supply.

Easy to combine

The oxygen or the thermal conductivity analyzer can be combined with the infrared photometer. This means that complex measuring requirements with up to five measuring components in one device can be fulfilled.

Easy to install

The control unit is provided with a terminal box with increased safety. Without compromising the hazardous area protection customers can safely and easily connect signal cables for analog output and status signals.

Easy to operate

- Operation directly through an explosion proof glass pane
- Touch-sensitive keys
- Multi-lingual, menu-driven operating interface
- Menu structure according to the EasyLine series
- Safe and reliable operation at any time, without having to open the housing

Easy communication

- Four analog outputs
- Up to 16 digital inputs and outputs
- Modbus interface
- PROFIBUS interface

This enables the analyzer data to be easily read, archived and visualised on a PC, PLC or process control system.

L3060

Typical applications

- Production, storage, processing and transport of flammable and non-flammable gases in hazardous areas
- Chemical, petrochemical and pharmaceutical industries
- Biogas, gases from waste disposal sites or sewage treatment plants
- Turbogenerator monitoring
- Electrostatic filter monitoring
- Inert gas monitoring
- Synthetic gas and fertilizer production







Proven measuring technology

Infrared photometer Uras26

Uras26 works with the NDIR technology and selectively measures the concentration of up to four gas components. The built-in calibration cell allows for calibration without having to use test gas bottles. The device stands out because of its high selectivity and stability. It is possible to use a 200 mm measuring cuvette with thermostat for the smallest measuring ranges.

Measuring components - smallest measuring ranges

- Other approved components and measuring ranges described in the data sheet
- Two measuring ranges per measuring component, free adjustable
- Up to four measuring components

Oxygen analyzer Magnos206

The measuring principle of the Magnos206 analyzer is based on the specific paramagnetic behaviour of oxygen. Thanks to the short T_{90} times, the Magnos206 is suitable for measuring rapid changes in the concentration of the sample gas.

Measuring components - smallest measuring ranges

- O₂ 0...0.5 Vol%
- Two measuring ranges per measuring component, free adjustable
- Suppressed measuring ranges e.g. 19...21 Vol% $\rm O_{2},$ suppression max. 1:10

Thermal conductivity analyzer Caldos25 and Caldos27

The gas analyzers use the thermal conductivity of the individual gas components for measurement. The Caldos25 is especially robust due to its measuring cell having a glass-coated resistor and is suitable for measuring corrosive gases. The Caldos27 has the advantage of a short T_{90} time and uses a micromechanical silicon sensor.

Caldos27

Measuring components - smallest measuring ranges

- $\begin{array}{lll} & H_2 \text{ in air} & 0...1 \text{ Vol\%} \\ H_2 \text{ in N}_2 & 0...1 \text{ Vol\%} \\ \text{He in air} & 0...2 \text{ Vol\%} \\ \text{CH}_4 \text{ in H}_2 & 0...3 \text{ Vol\%} \end{array}$
- For other components and measuring ranges please refer to the data sheet
- Two measuring ranges per measuring component, free adjustable
- Up to four measuring components

Caldos25

Measuring components - smallest measuring ranges

 $\begin{array}{lll} - & \text{H}_2 \text{ in N}_2 \text{ or in air} & 0...0.5 \text{ Vol\%} \\ - & \text{SO}_2 \text{ in N}_2 \text{ or in air} & 0...1.5 \text{ Vol\%} \end{array}$

- One measuring range per measuring component
- Up to three measuring components

Certifications

Certified for ATEX II 2G Ex de IIC T4, other local certifications

Control unit

- Wall-mounted housing acc. to IEC/EN 60079-1
- Terminal box acc. to IEC/EN 60079-7





The Added Value What you can expect from a market leader

As one of the world's leading suppliers of analyzer technology, we offer our customers additional benefits and services other manufacturers can not provide. With the added values ABB Analytical helps to improve performance and reliability at work.

Best choice of analyzers tailored to your needs

We offer the broadest selection of measuring principles under one roof. All types of analyzers share a common operation to reduce the need for training and spare parts.

Certified sales and service partners wherever you are

Our "Manufacturer Certified Service" program involves more than 300 service specialists with many years of experience and comprehensive know-how working for our clients on-site worldwide. Our engineers are your professional partners dedicated to finding the best solutions for your measuring tasks. They regularly undergo manufacturer training and certification.

Long-term security in your investment

Our comprehensive and transparent life cycle plan for each of our products covers the service of spare parts and service support for their entire lifetime. Our products are extendable with upgrade programs keeping them technologically up-to-date at all times.

Most powerful software solutions

Full remote control and maintenance access to the system inside a protected network and quality monitoring (QAL3) are available for ABB analyzers. Integrated controllers with PLC functionality provide monitoring while controlling the measurement from sample taking right up to analysis.

Unique time and cost saving calibration concepts

ABB has 30 years of unrivalled experience in producing gas-filled calibration cells, allowing internal calibration without test gas cylinders for photometers. Single-point calibration with ambient air as the standard gas is also possible.

Unrivalled options for connectivity

ABB gas analyzers and systems excel in Ethernet network abilities and Modbus or PROFIBUS interfaces. This enables the analyzer data to be easily read, archived and visualized on a PC, PLC or process control system.

Assured quality through independent certification

ABB provides all major international certificates for CEMS, hazardous area installations, metrological approvals, electrical safety and quality and environmental management.



Contact us

ABB Automation GmbH Process Automation

Stierstädter Straße 5 60488 Frankfurt am Main, Germany Email: cga@de.abb.com

ABB Limited Process Automation

Oldends Lane GL10 3TA Stonehouse Gloucestershire, United Kingdom Phone: +44 1 453 826661 Fax: +44 1 453 829671

ABB Australia Pty Limited Process Automation

Bapaume Road

2170 Moorebank New South Wales, Australia Phone: +61 2 9821 0968 Fax: +61 2 9400 7050

ABB Pte. Ltd. Process Automation

2 Ayer Rajah Crescent 139935 Singapore, Singapore Phone: +65 6773 5961

ABB Ltd.

Process Automation

Fax: +65 6778 0222

14 Mathura Road 121003 Faridabad, Haryana, India

Phone: +91 129 2279627 Fax: +91 129 2279692

www.abb.com/analytical

ABB Engineering Ltd. Process Automation

10 Jiuxianqiao Lu 100015 Beijing, China

Phone: +86 10 84566688 ext.6217

Fax: +86 10 84567650

ABB Inc. Process Automation

3700 W Sam Houston Parkway South, Suite 600, Houston, TX 77042, USA

Phone: +1 713 587 8000

To find your local ABB contact visit: www.abb.com/contacts

Note:

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB.

Copyright© 2010 ABB All rights reserved

