# Gas Analyzer EL3060

The specialists for hazardous areas





### Compact and combinable – the analyzer EL3060

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 2 G and can be used, due to its high safety standards, in plants with potentially explosive gas atmospheres in Zone 1 and Zone 2.

C6H14

0.2ppm

500

### **Typical applications**

- Production, storage, processing and transport of flammable and non-flammable gases in hazardous areas
- Chemical and petrochemical industry
- Process industry
- Pharmaceutical industry
- Biogas, gases from waste disposal sites or sewage treatment plants

### **Compactly built**

The EL3060 series is convincingly compactly built. The gas analyzer 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 as well as one thermal conductivity analyzer can be combined with the infrared photometer. This means that complex measuring requirements with up to 5 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 explosionproof glass pane
- Touch-sensitive keys
- Multi-lingual, menu-driven operating interface

EL3060

- 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.

## **Proven measuring technology**

### **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

■ O<sub>2</sub> 0...0,5 Vol%

 $CH_4$ 

- Two measuring ranges per measuring component, free adjustable
- Suppressed measuring ranges e.g. 19...21 Vol% O<sub>2</sub>, suppression max. 1:10

### Thermal conductivity analyzer Caldos25/27

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 micro-mechanical silicon sensor.

# Measuring components – smallest measuring ranges Caldos27

$H_2$ in Air	01 Vol%
$H_2$ in $N_2$	01 Vol%
He in Air	02 Vol%
$CH_4$ in $H_2$	03 Vol%

### 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

CO	010	ppn

1

- CO<sub>2</sub> 0...5 ppm
- SO<sub>2</sub> 0...25 ppm
- NO 0...75 ppm
- Other approved components and measuring ranges described in the data sheet
- Two measuring ranges per measuring component, free adjustable
- Up to four measuring components

- For other components and measuring ranges please refer to the data sheet.
- Two measuring ranges per measuring component
- Up to four measuring components

## Measuring components – smallest measuring ranges Caldos25

$H_2$ in $N_2$	00.5 Vol%
$H_2$ in Air	00.5 Vol%
$SO_2$ in $N_2$	01.5 Vol%
$SO_2$ in Air	01.5 Vol%

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

#### Certifications

Certified for ATEX II 2G EEx 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

### Analyzer technology is our strength

ABB is one of the leading international companies in the field of analyzer technology. Thanks to decades of experience, we can develop innovative instruments and systems to meet individual requirements of your company. And with a distribution network covering more than 40 countries, ABB's know-how is also available to you – worldwide. ABB is your partner: From consulting to project planning, from system installation to after-sales service.

ABR



More than 75 years of experience in the development and production of analyzers as well as regular contacts with our customers are the basis for our innovative solutions, which have always been the market leader. Under the brand name "Hartmann & Braun", our products for the continuous measurement of processing gases have gained an outstanding international reputation and represent the leading edge of technology. Since then, analyzers with the names Uras, Limas and Magnos have enjoyed worldwide acclaim and stand for utmost efficiency. Today, more than 35,000 of these analyzers have been installed throughout the world – in almost every industry.

### Service and support

Facilities and systems have to run perfectly around the clock to ensure high productivity from invested capital. That's when it's important to have a dependable partner, who maintains your analytical instruments and systems throughout their entire service life and makes sure they run flawlessly and who'll be there at once if there's an emergency.

In order to guarantee this, ABB has introduced the concept of **"Manufacturer Certified Service"**. Specially trained service specialists with many years of experience and comprehensive know-how are ready to assist you in word and deed.

ABB continuously optimizes its products, therefore the technical data in this document is subject to change.

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