Safe Area - Oxygen Analyser
AZ20

The Endura AZ20 is the latest in a long line of high-quality, combustion gas analyzers from ABB.
The sensor, based on a zirconium oxide cell, is mounted at the tip of the probe that is inserted in the flue duct. The resulting direct, in-situ measurement provides accurate and rapid oxygen reading for combustion control optimization and emissions monitoring.

Features

- Suitable for Safe Area
- Robust, long-life probe for process temperatures up to 800 °C (1,472 °F)
- Probe lengths up to 4.0 m (13.1 ft)
- Suitable for Safe Area & wide range of applications
- Optional flow rate control to the sensor
- Unique integrated automatic calibration
- Stable and accurate oxygen measurement
- HART® communications

Specifications

Range: 0.01 to 100 % O2
Ambient operating temperature
- Transmitter –20 to 55 °C (–4 to 131 °F)
- Probe –20 to 70°C (–4 to 158 °F)

Storage temperature : –40 to 85 °C (–40 to 185 °F)
AC power supply : 100 to 240 V AC ±10 % (90 V min. to 264 V max.) 50 Hz
Probe body material : 316L stainless steel
Easy configuration, monitoring and intuitive HMI

Hazardous Area - Oxygen Analyser
AZ30

The Endura AZ30 is an explosion-proof / flameproof combustion gas Analyser system designed for use in Hazardous Areas. Certification covers not only the terminal housing, but the complete system.
The sensor, based on a zirconium oxide cell, is mounted at the tip of the probe that is inserted in the flue duct. The resulting direct, in situ measurement provides accurate and rapid oxygen reading for combustion control optimization and emissions monitoring.

Features

- Hazardous area designations – system
- Low surface temperature : Safe T4 135 °C (275 °F) surface temperature rating
- Easy configuration, monitoring and intuitive HMI
- HART communications
- Robust, long-life probe for process temperatures up to 800 °C (1472 °F)
- Fast response to process variations
- Stable and accurate oxygen measurement
- Easy compliance for emission monitoring regulation

Specifications

Range : 0 to 20.95 % O2 max. (condition of certification)
System accuracy : < ±0.75 % of reading or 0.05 % O2
Ambient operating temperature:
Transmitter: –20 to 55 °C (–4 to 131 °F)
Probe: –20 to 70 °C (–4 to 158 °F)
Storage temperature : –40 to 85 °C (–40 to 185 °F)

AC power supply: 100 to 240 V AC ±10 % (90 V min. to 264 V max.)
50 Hz, Maximum current 1.2 A
Ingress protection : probe (excludes process side of mounting flange)
IP66 and NEMA 4X
Electronics enclosures (remote and integral) IP66 and NEMA 4X

Safe Area - EasyLine Continuous Gas Analyzer EI3020

Measuring Technology
- Uras26 (infrared) for the measurement of gas like components CO, NO, SO2 & CO2
- Magnos27 (Paramagnetic) for the measurement of O2 gas
- Caldos27 (Thermal conductivity) for the measurement of gas mixtures like Ar in O2, H2 in Ar.
- Fidas 24(Flame Ionization Detection) for the measurement of Hydrocarbons.

Features

- Suitable for Safe Area
- Detectors with different measurement principles for numerous process and emission monitoring applications
- Up to five measurement components per gas analyzer
- Suitable for measuring flammable gases
- Automatic calibration including pump and valve control
- Simplified calibration with air or integral calibration cells eliminating the need for test gas cylinders
- Simple menu-driven operator interface
- Housing version for 19-inch rack mounting (3 height units, IP20)

Specifications

Certification : TUV-QAL1	Self monitoring function to indicator maintenance requirement
Housing design : 19” Inch Rack Mounting	Power supply : 110 to 230V AC, 50Hz
Configurable Analog outputs, Digital inputs & outputs	

Hazardous Area - EasyLine Continuous Gas Analyzer EL3060

The EL3060 Series includes the following analyzers
- Uras26 infrared photometer for the measurement of infrared-active gas components, such as CO, NO, SO2
- Magnos28 oxygen analyzer for the measurement of O2 in operating gas or in N2

An EL3060 gas analyzer consists of the control unit and one or two analyzers.
All gas connections are guided through flame barriers.

Features

- Design in explosion protection II 2G or EPL Gb for measuring flammable and non-flammable gases for use in Zone 1 and Zone 2
- Approvals according to ATEX, IECEx
- Flameproof enclosures for the control unit with one analyzer and the Uras26 infrared analyzer
- No purging of the flameproof enclosures
- Safe operation by means of touch-sensitive keypads through the glass
- Ethernet, Modbus and PROFIBUS interfaces
- Configurable analog outputs and digital inputs and outputs

Specifications

Housing : Explosion protection	Input voltage : 100 to 240 V AC, 50 Hz, ±3 Hz
Housing protection type : IP 65 to EN 60529	Power : Maximum 187 VA
Control unit : (with or without Magnos28, Caldos25, or Caldos27 analyzer)	Color : Light gray (RAL 7035)
	Weight : Approx. 22 kg
Purge gas pressure : pabs ≤ 1080 hPa	Housing protection type : IP 65 to EN 60529
Purge gas flow : During operation ≤ 10 l/h	Materials : Aluminum, glass

Gas Chromatographs
PGC5000A Controller

The new PGC5000A Controller is designed with a real time embedded operating system (RTOS) to guarantee critical system uptime, security and the highest level of data determination. A local 10 inch graphical, SVGA touch screen with multi-touch control for redundant methods of analyzer navigation at the local analyzer interface constructed in a Simple Tab Layout for ease-of-use.

Features

- Multiple configurations : Supports up to 4 Smart OvensTM Communication interfaces
- Communication interfaces : Ethernet, OPC (via VistaGateway), MODBUS, 4-20mA analogs, VistaNET2.0 compatible Maximum application flexibility
- PGC5000B Smart OvensTM target simple applications with a fixed set of features
- PGC5000C Smart OvensTM target complex applications requiring multiple detectors for maximum application densification

Specifications

Environmental (enclosure): Protected from weather: IP 54, (NEMA 3 equivalent)
Ambient temperature range : 0 to +50° C (32 to 122° F)
Humidity : 95% relative humidity, non-condensing
Weight: 20 kg (44 lbs) (minimum, configuration dependent)
Mounting: Wall: 33 mm (1.3 in.) from wall with brackets
Floor : Optional dolly with casters

Voltage: 100 – 240 VAC, Frequency: 50 Hz
Power consumption: 120 Watts startup and steady-state operation
Typical, varies with installed options.
Purge wait time: 18 minutes (Class I, Division 1 / zone 1 area)
Supply connection : 1/4 inch tube, minimum
Supply pressure : 414 kPa (60 psig) minimum