Press Release

Limas23
the clever solution for measuring NOx

The new Limas23 is a compact solution for the continuous measurement of nitrogen oxides, sulfur dioxide and oxygen in one analyzer. This specialist measures the components NOx as NO and NO_2 without the use of a converter. The Limas23 is fully certified according to EN14181 and has an integrated web server with Ethernet connection.

Nitrogen oxides (NOx) are considered to be environmentally relevant gases, which cause harm to human beings and environment. NOx emissions are therefore limited. In Europe the NOx limits and their monitoring are specified for the individual emission sources in Directives. Energy generators, such as power stations, refuse incineration plants and boilers, are typical emission sources, but automobiles, aircraft and ships and some chemical processes also emit NOx.

The Limas23 continuously measures the components NO and NO_2 without using a converter, as well as the third component SO_2, by the highest measured value stability.

The Limas23 can be combined with a Magnos206 for paramagnetic oxygen measurement or an electrochemical O_2 sensor in the same EasyLine housing. As a result, the customer acquires a compact solution which performs the O_2 reference measurement required for emission monitoring at the same time. All the relevant harmful and reference components as defined in EU Directives are included in one EasyLine analyzer.

With the EasyLine analyzers, ABB offers a completely automated QAL3 solution to monitor and document precision and drift in the analyzer. An integrated web server with Ethernet connection enables easy readout of the saved data with a standard web browser software.

The Limas23 is extremely low-maintenance and user-friendly. As a result of the ruggedized design of the UV photometer, the elaborate utilities required in the competing CLD process, as well as consumables and the usual NOx converters are a thing of the past. In addition to this, the Limas23 anticipates imminent maintenance work by means of status signals, so that the operator is always informed of the reliability of his analyzer in good time.

As a UV photometer, the values measured by the Limas23 are not influenced by H_2O or CO_2 fractions in the sample gas. The Limas23 is automatically calibrated with atmospheric air and gas-filled adjusting cells which have proven their long-term stability in tests over many years. The well-known unreliability of NOx test gas bottles is no longer an issue.

Information Table

Continuously measuring UV process photometer Limas23

- Sample components: up to three, NO, NO_2 and SO_2
  Smallest measuring ranges:

NO: 0… 50ppm
NO_2 0… 50ppm
SO_2 0… 100ppm

- additional O_2 measurements in one analyzer
- quartz cells for highly corrosive sample gases
- gas-filled adjusting cells for checking the zero and end-point
- QAL3 monitoring according to EN14181

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