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|  | <p><b>Description</b></p> <p>In-system OXYGEN ANALYZER is a new generation of compact and robust Portable Oxygen Analyzer special built for use in demanding industrial and laboratory processes</p>  |
|   | <p><b>Advantage</b></p> <ul style="list-style-type: none"> <li>- Very fast measurement response</li> <li>- Full measuring range available from 100% oxygen to <math>&gt;10^{-29}</math> bars O<sub>2</sub></li> <li>- No cross-sensitivity to N<sub>2</sub>, Ar, He, CO<sub>2</sub>, H<sub>2</sub>O, SO<sub>2</sub> and HCl</li> </ul>  |
|   | <p><b>Application</b></p> <ul style="list-style-type: none"> <li>- Control of critical oxygen atmospheres where low oxygen partial pressures are required</li> <li>- Control of the combustion process in lean-burn applications</li> <li>- Testing the purity of gases as N<sub>2</sub>, Ar, He and CO<sub>2</sub></li> <li>- Measuring of oxygen within the chemical, metallurgical and medical industry, research and development</li> </ul> |
| <b>Hardware</b>   |   |
| <b>Dimensions, weight</b>   | Height: 105 mm, Width: 160 mm, Length: 195 mm – weight: 1,7 kg  |
| <b>Cabinet</b>  | Metal cabinet. Protection class: IP 44, colour: RAL 7031 (Dark grey)  |
| <b>Voltage</b>  | 110-230 VAC supply via separate adapter with EU plug  |
| <b>Temperature</b>  | Sensor temperature: Approx. 700°C, see actually Sensor Calibrations Certificate<br>Gas inlet temperature: 10-50°C<br>Ambient temperature: 10-50°C   |
| <b>Fittings for measure gas connection</b>  | Gas in and gas out: 1/8 NPT, female   |
| <b>Data for sensor</b>  |   |
| <b>Oxygen sensor</b>  | Potentiometric solid-state sensor with Zirconia electrolyte   |
| <b>Range of measuring</b>   | Full range available from 100% to $>10^{-29}$ bars of O <sub>2</sub>  |
| <b>Warm up time</b>   | Approx. 10 min. - Full stability: Approx. 30 min  |
| <b>Measure gas flow</b>   | 50 ml/min to 1000 ml/min - Incorporated gas pump and Mass Flow Controller   |
| <b>Reference gas</b>  | Stationary atmospheric air (20,9 % O <sub>2</sub> )   |
| <b>Sensor output signal</b>   | The sensor generate an EMF signal which is logarithmic and conversely proportional to the oxygen partial pressure in the measured gas after Nernst's equation   |
| <b>Measurement accuracy</b>   | $< \pm 1$ % of measured value   |
| <b>Live expectancy</b>  | Normally: $> 20.000$ hours  |
| <b>Data for flow system</b>   |   |
| <b>Measurement gas pump</b>   | Long life Micro Diaphragm Pump  |
| <b>Flowmeter</b>  | Mass Flow Controller with flow regulation, scale: 50-1200 ml/min [Air]  |
| <b>Data for display</b>   |   |
| <b>Display</b>  | Programmable via front keys   |
| <b>Data for analogue output</b>   |   |
| <b>Output/alarms</b>  | Analogue output: 0/4-20 mA, Change-over relays, potential free, scalable<br>Programmable via front keys   |
| <b>Product information</b>  |   |
| <b>Declaration of conformity</b>  | This product complies with the current EU Directives  |
| <b>Warranty</b>   | General two years, pump only one year   |