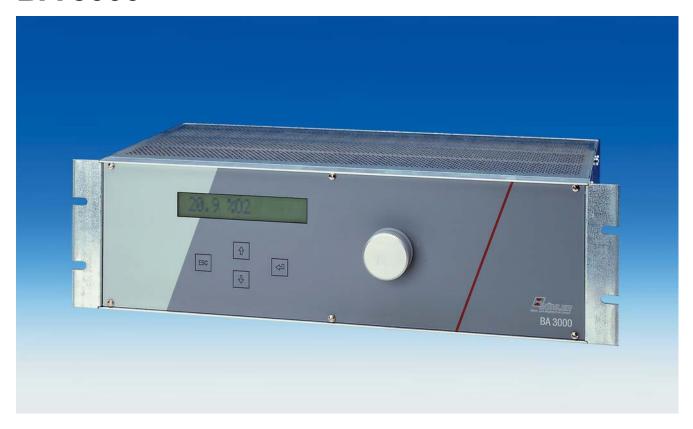


Oxygen Analyser BA 3000



The BA 3000 is designed for the continuous analysis of oxygen in stationary applications. The unit is ideal for use in process, safety or emission control applications. The measurement is highly specific to oxygen and gives a reliable analysis over a broad range. The paramagnetic cell is thermally stabilized, has very low cross-sensitivity to background gases and has a high life expectancy. The measurement cell is protected against particulate contamination by a fine filter with easy access on the front panel.

The BA 3000 is configured in a 19" rack mountable housing or a wall mount housing. Instrument operation is menu guided with a keypad at the front panel. Calibration is carried out with zero and span gas. The measurement range is user adjustable from 0 to 100%. Optional pressure compensation makes it possible to use the BA 3000 in applications with varying ambient or sample gas pressure. Within the measurement range, two alarm outputs can be individually configured.

- Paramagnetic measurement cell
- Accurate, fast and reliable O, analysis
- Easy operation
- 19" rack mount or wall mount housing
- 4 20 mA output
- Menu-guided operation
- Password protected
- Optional internal pump
- User selectable measurement range
- Long life, reliable cell
- Programmable alarm relays
- Thermally stabilized measurement cell



Technical Data

Measurement component oxygen

 $\begin{array}{lll} \mbox{Highest measuring range} & 0 \dots 100 \mbox{ Vol } \% \mbox{ O}_2 \\ \mbox{Smallest measuring range} & 0 \dots 2 \mbox{ Vol } \% \mbox{ O}_2 \\ \mbox{Measuring range suppression} & \mbox{programmable} \\ \mbox{Measuring principle} & \mbox{paramagnetic} \end{array}$

Specification

 $\begin{array}{ll} \mbox{Accuracy} & 0.1 \mbox{ Vol } \% \mbox{ O}_2 \mbox{ absolute} \\ \mbox{Linearity fault} & \leq 0.5 \mbox{ \% range} \\ \mbox{Repeatability} & \pm 0.03 \mbox{ \% O}_2 \\ \mbox{Response time}(T_{90}) & < 10 \mbox{ s} \end{array}$

Zero drift $\leq \pm 0.05 \text{ Vol.}\% \text{ O}_2 \text{ per week}$

 $\begin{array}{lll} \mbox{Span drift} & \leq \pm \ 0.15 \ \% \ \mbox{of measured range per week} \\ \mbox{Temperature effects} & \mbox{zero} & \leq \pm \ 0.01 \ \mbox{Vol.} \% \ \mbox{O}_2 \ \mbox{/ K} \\ \mbox{span} & \leq \pm \ 0.025 \ \mbox{of range / K} \\ \end{array}$

Pressure effects 1 % sample gas pressure change effects 1 % display change (without pressure compensation)

Sample conditions

Sample flow rate

Sample temperature + 5 °C to 45 °C Sample pressure min.: 10 hPa

with internal pump: -5 hPa

max: 500 hPa 10 ... 90 l/h

with internal pump: approx. 30 l/h

with pressure compensation (ARP 1.2) min. 40 l/h

Sample gas requirements dew point min. 5 °C below ambient temperature, clean sample gas is necessary

Environmental conditions

Operating temperature $+ 10 \,^{\circ}\text{C}$ to $45 \,^{\circ}\text{C}$ Storing conditions $- 25 \,^{\circ}\text{C}$ to $+ 65 \,^{\circ}\text{C}$

Relative humidity < 75%

Signal outputs

Signal output 4...20 mA or 0... 20 mA

load max.500 $\boldsymbol{\Omega}$

Alarm relay 2x limit, 1x fault, 48V DC, 1A, 30W

Readings

Measured value display LCD Status display LCD

Power supply 100 - 240 VAC; 50/60 Hz

Mechanical data

Housing 19", 3 HE (133 x 489 x 245 mm) or

wall mount housing (241 x 236 x 270 mm)

Gas input pipe fitting Ø 1/4",1.4401 Sample gas filter filter with glass fibre husk

Sample wetted parts PVDF, glass, SS 1.4571, gold, viton, platinum-iridium, epoxy resin

Weight approx. 6 kg

Please indicate with order		Options	
Туре	Part-no.	Туре	Part-no.
BA 3000: 19", 100-240V, 50/60 Hz	55 07 199	Internal pump	55 07 1991
BA 3000: wall mount, 100-240V, 50/60 Hz	55 07 599	Pressure compensation (ARP 1.2)	55 07 1993
		Back pressure regulator ARP	46 00 999
Spare filter element, FE-E2, 5 pcs.	41 15 09 910	Stainless steel piping	55 07 1994