

Oxygen analyser Oxystem 600



Application

Combustion monitoring and control in power plants and other heating systems. Suitable for continuous operation, even under arduous conditions.

Description

The sensor of the flue gas probe is based on the principle of solid electrolytes (zirconium dioxide). The free oxygen ion movement begins at temperatures of more 500 °C (solid electrolyte potentiometric method).

The sensor is heated. The oxygen concentration is calculated from the cell voltage and the temperature according to Nernst's law.

The analyser consists of a probe and an evaluation unit. The probe is directly immersed into the gas to be measured (in situ). The probe tip should be approximately in the centre of the chimney. The electronic system is equipped with a cable (5 m) with plug which is plugged directly into the probe.

The evaluation unit is operated by means of the keypad and the display. The system displays the current oxygen concentration in percent by volume (0-21 % O₂) and the temperature of the measuring cell.

3 relay outputs (2 x limit control, 1 x alarm) as well as 1 analogue output are available. The system can be set to automatic calibration.

Technical specifications

Probe

Operating temperature range

Medium: +150/+680 °C
Ambient: -15 /+80 °C

Permissible reference throughput

0,5–10 l/h

Permissible gas speed

< 10 m/s

Supply voltage

AC 42 V

Power consumption

160 VA

Dimensions (Ø x L)

51 x (250/400/800/1,300/1,800) mm

Protection

IP 55 (EN 60529)

Weight

4/6.5/8/10.5/12 kg, depending on selected probe length

Evaluation unit

Operating temperature range

Ambient: +5/+50 °C

Display

4-line alphanumeric LCD display (temperature, oxygen concentration % by vol.). Range can be selected as required between 21 % by volume and 1 % by volume O₂. Operation via keypad and menus.

Supply voltage

AC 110–230 V, 50–60 Hz

Power consumption

20 VA

Analogue output

0–20 mA oder 4–20 mA (selectable)

Relay outputs

Relay contacts: 3 voltage-free changeover contacts

Contact rating: 0,5 A

Housing (with connection box)

W x H x D: 310 x 270 x 220 mm

Protection

IP 55 (EN 60529)

Weight

4.5 kg

Power supply unit

Operating temperature range

Ambient: -15/+50 °C

Supply voltage

AC 110–230 V, 50–60 Hz

Power consumption

160 VA (continuous operation)

Dimensions

W x H x D: 260 x 180 x 130 mm

Protection

IP 55 (EN 60529)

Weight

7.5 kg

DG: E	Part no.	Price €
Probe 250 mm	69447	
Probe 400 mm	69448	
Probe 800 mm	69449	
Probe 1,300 mm	69450	
Probe 1,800 mm	69451	
Evaluation unit	69453	
2 limit control contacts	69454	
Wall duct	69455	
Sep. power supply unit for T > 45 °C	69457	