

Oxygen analyser Oxystem 600



- In situ measurement directly in the gas duct
- Fast response
- Relay output for connection of external equipment
- Easy operation



Application For monitoring and controlling combustion processes in power plants and other heating systems. Suitable for continuous operation, even under rough ambient conditions.

Description The analyser consists of a probe and a control 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 control unit is equipped with a cable (5 m) with a connector which is plugged directly into the probe. 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 than 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 display shows the current oxygen concentration in percent by volume (O₂) and the temperature of the measuring cell. 3 relay outputs (2 x limit value, 1 x alarm) as well as 1 analogue output are available. The system can be set to automatic calibration.

Technical specifications

Operating temperature range

Medium: +150/+680 °C
 Ambient: -15/+80 °C (probe)
 +5/+50 °C (control unit)
 -15/+50 °C (power supply unit)

Permissible reference gas throughput

0.5/10 l/h

Permissible gas velocity

< 10 m/s

Supply voltage

AC 42 V (probe)
 AC 110–230 V, 50–60 Hz V (control unit)

Power input

160 VA (probe)
 20 VA (control unit)

Analogue output

0–20 mA or 4–20 mA
 (selectable)

Switching outputs

Relay contacts: 3 voltage-free changeover contacts
 Contact rating: 0.5 A

Display

Four-line, alphanumeric LC display (temperature, oxygen concentration % by vol.). Measuring range can be selected as required between 21 % by volume and 1 % by volume O₂ via the software. Operation via keypad and menus.

Housing

W x H x D: 310 x 270 x 220 mm
 Weight: 4.5 kg

Dimensions probe

(Ø x L): 51 x (250/400/800/1300/1800) mm
 Degree of protection: IP 55 (EN 60529)

Dimensions power supply unit

W x H x D: 260 x 180 x 130 mm
 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	
Control unit	69453	
2 contacts for limit values	69454	
Wall duct	69455	
Power supply unit for temperatures > 45 °C	69457	