



Oxygen 0-25% Vol. Gas Leak Unit for 1 to 2 Detectors **O2SP**

May.14



O2SP



Technical Data

Gas	Oxygen O ₂
Detection principle	Electrochemical, diffusion
Measuring range	0 - 25 vol. %
Accuracy	+/- 0,1 vol. %
Long term output drift	<4% signal loss/year
Response time	t ₉₀ <15 sec.
Mounting height	High density than air mount low Low density than air mount low
Output signal	(0)4-20mA, load 500ohm Selectable (0)2-10Vdc, load 50kohm Relay 1 30Vac/dc, 0,5A, pot.free SPDT Relay 2 30Vac/dc 0,5A pot.free SPNO/SPNC Binary 30Vdc, 0,1A open collector
Input signal ext. detector	4-20mA, input resistance 200ohm
Voltage external detector	24Vdc, max, load 50mA
Power supply	18-28Vac/dc, reverse polarity prot. 90 to 250Vac 50/60Hz
Power consumption	100mA, max (2,5VA)
Expected lifetime	2 years, normal operating envirom.
Humidity range	15-95% rH non-condensing
Operating range	-10 up to +50C
Rating	IP65 Protection Class
Pressure range	Atmospheric +/-10%

We reserve the right to make changes and improvements in our products which may effect the accuracy of the information contained in this leaflet.

Features

- Integrated gas sensor, long life expectancy
- Good resistance to poisoning
- Continuous monitoring
- Standard with display/LED/keypad/ internal buzzer
- Modular plug-in technology
- Easy maintenance/calibration
- 4 x status LED without display (option)
- 3 power relays, potential-free, 250Vac/dc 5A (option)

Application

O2SP is suitable for a wide range of commercial and industrial applications.

Free programmable parameters and setpoints enable the individual adaption to a variety of possible applications in the field of gas measuring and monitoring.

Description

The O2SP is provided with an input for one external detector. 4 alarm thresholds per detector are free programmable.

Configuration and operation are possible via logical, simple system menu structure without specific programming knowledge

Ordering Codes

O2SP 24	Gas Leakage Unit 0-25 vol.% 24Vac/dc
O2SP 230	Gas Leakage Unit 0-25 vol.% 230Vac

DUCT	Duct Mounting
POW 1	1 x Power relays 250Vac, 5A, potential-free, changeover
POW 2	2 x Power relays 250Vac, 5A, potential-free, changeover
POW 3	3 x Power relays 250Vac, 5A, potential-free, changeover
EPS	Supply duration 60min., maintenance-free, changeover
CAL 2	Calibration Kit f
HEAT	Temp.controlled heating element 3C +/-2C0,3VA
FLASH	Flash-light built-in
AIN	4-20m analogue input
STAIN	Enclosure of stainless steel

Warning devices See special datasheet

Warning signs See special datasheet

Physical characteristics

Enclosure	Polycarbonate, halogen-free On request stainless steel
Flammability	UL94 V2
Enclosure colour	RAL 7032 light grey
Dimensions WxHxD	130 x 130 x 75mm 130 x 130 x 100mm (E-version)
Weight	approx 0,6kg
Cable entry	Standard 3 x M20
Wire connection	Screw terminal, min 0,25mm ² and max 2,5mm ²
Wire distance	Current signal 500m Voltage signal 200m
Guidelines	EMC Directive 2004/108/EC Low Voltage Directive 2006/95/EC EN 61010-1:2010 ANSI/UL 61010-1 CAN/CSA-C22.2 No.61010-1

LCD display

LCD	Two lines, each 16 characters
Status LED (4)	Normal operation: Fault - Alarm 1 - Alarm 2
Operation	4 push-buttons - menu-driven
Power consumption	10mA (max 0,3VA)

Heating

Temperature controlled	3C +/-2C
Ambient temperature	-30C
Power supply	18-28Vac/dc
Power consumption	0,5A, 12VA

Options

Status LED (without display)	Power - Alarm 1 - Alarm 2 - Fault
Power supply 230Vac	90-250Vac 50/60Hz
Power relays (3)	250Vac, 5A, potential-free, change-over contact
Emergency power supply	Supply duration 60min, maintenance-free
LED flashing light Warning light	IP65, LED, 3500lm 18-28Vac/dc, 45mA max. (1,2VA)

External Horn

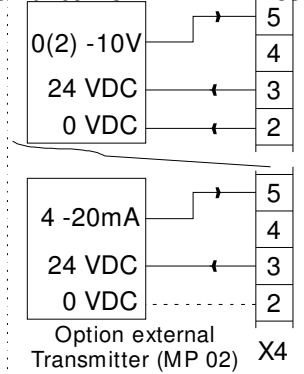
87db (1000m) 18-28Vac/dc, 6mA

External Multi-sound Horn

85-100db, 18-28Vac/dc, 6mA

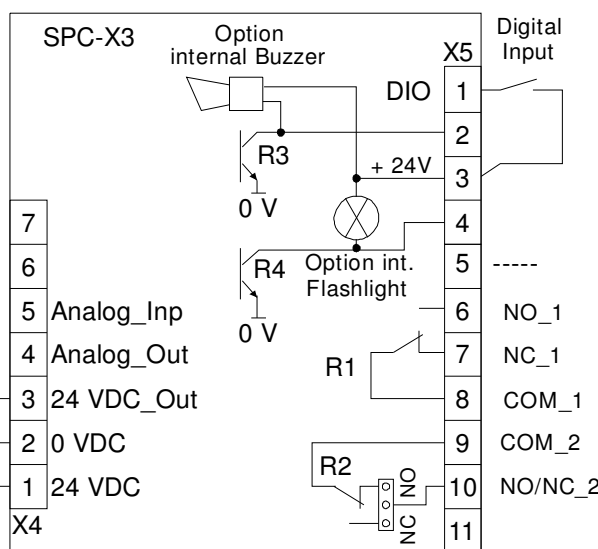
Internal buzzer

83db (distance 200m) 2300Hz

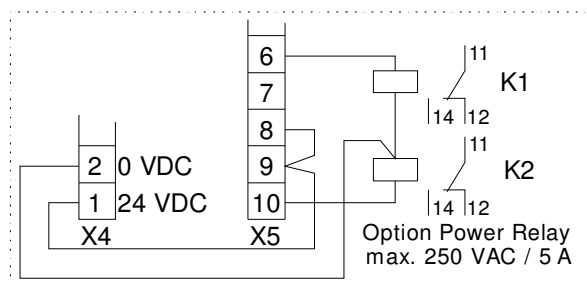
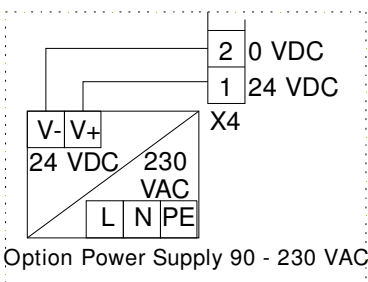
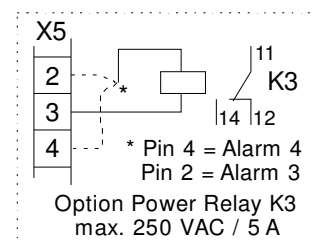
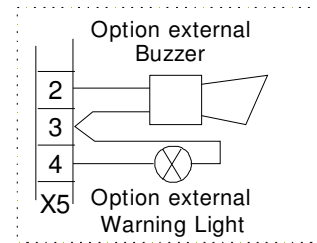


Analog Output Signal:
adjustable via jumper
(0)4-20mA / (0)2-10 V

Analog output
0 V
24 VDC



R1: SPDT, 30 VAC/DC, 0,5 A
 R2: SPNO/SPNC, 30 VAC/DC, 0,5 A
 R3/R4: Open Collector, 30 VDC, 50 mA



Note: The alarm outputs R3 and R4 are designed as open collector outputs.
 Warning lamps / horn combination units with common ground can therefore not be connected!