



Display-version



O2 Wall



O2 Duct



Features

- Digital measurement value processing incl. temperature compensation
- Comfort calibration with selective access release
- Continuous monitoring
- Low output drift
- Poisoning stable
- Modular plug-in technology
- Easy maintenance/calibration
- Manual addressing for RS485 mode. eg. Modbus

Technical Data

Gas	Oxygen O2
Detection principle	Electrochemical, diffusion
Measuring range	0 - 25 vol. %
Accuracy	+/- 0,1 vol. %
Long term output drift	<4% signal loss/year
Response time	t90 <15 sec.
Storage time	Max 6 months
Mounting height	1,5 to 1,8 metres above floor combustion application Others see AP. webbside
Output signal	(0)4-20mA, load <500ohm 0,02mA Selectable (0)2-10Vdc, load >50kohm 0,02V Starting point 0/20% Relay 1 30Vac/dc, 0,5A, pot.free SPDT Relay 2 Dito SPNO/SPNC potential free Consumption 30mA, max 0,8VA
Serial Interface	Transciever RS485/19200 Baud/9600 at Mod
Power supply	18-28Vac/dc, reverse polarity prot. for 2-wire mode only Vdc
Power consumption	22mA, max (0,6VA)
Expected lifetime	2 years, normal operating envirom.
Humidity range	5-95% rH non-condensing Short time 0-99% rH non-condensing
Operating range	-10 up to +50C
Rating	IP65 Protection Class
Pressure range	Atmospheric +/-10%

Application

For detection of oxygen in rooms where changes of the oxygen concentration are possible, such as laboratories and food production etc.

Due to the standard output signal and the RS485 interface the O2 transmitter is compatible to the Gas Controller GCM and GCD as well s to any other electronic control or automation system

Ordering Codes

Wall	Manual calibration via potentiometer
O2 025	0-25 vol. %
	Service Tool
O2 025T	0-25 vol. %
MOD	Protocol for Modbus
GCD	Protocol for GCD-series
REL	Relay pack see rear side
DUCT	Duct Mounting
LCD	Two lines display, 16 characters each
CAL 2	Calibration Kit for Tox-transmitters
HEAT	Temp.controlled heating element 3C +/-2C0,3VA
BUZZ	Internal warning summer 85dB
STAIN	Enclosure of stainless steel
SERV	Service Tool with Keypad and LCD-display
AIN	4-20mA analogue input
GAS 17	Calibration gas 17 liter
REG	Pressure regulator flow adjusted to 0,5 lit/min.
Warning devices	See special datasheet
Warning signs	See special datasheet

Physical characteristics

Enclosure	Polycarbonate, halogen-free
Flammability	UL94 V2
Enclosure colour	RAL light grey
Dimensions WxHxD	94 x 130 x 57mm
Weight	approx 0,5kg
Cable entry	Standard 1 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 EN 61010-1:2010

Warning buzzer

Accoustic pressure	85db (distance 300m)
Frequency	3,5 kHz
Power consumption	30mA, (max 0,8VA)

LCD display

LCD	Two lines, each 16 characters
Power consumption	10mA (max 0,3VA)

Heating

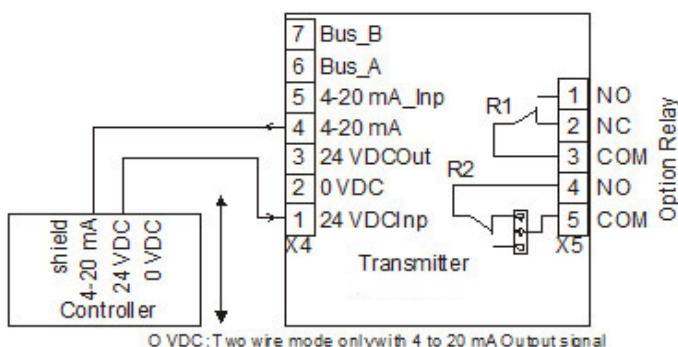
Temperature controlled	3C +/-2C
Ambient temperature	-40C
Power supply	18-28Vdc/ac
Power consumption	0,3A, 7,5VA

Analogue input

Only for RS-485 mode 4-20mA overload and short-circuit proof, input resistance 200ohm

Power supply for external transmitter 24Vdc max.50mA

Connecting Diagram



Relay Package

The two relays are activated in dependence of the gas concentration.

If the gas concentration exceeds the adjusted alarm threshold, the corresponding relay switches on.

If the gas concentration falls below the threshold minus hysteresis, the relay switches off again.

The contact function for relay 2, NC (normally closed) or NO (normally open), can be selected via jumper NO/NC.

See fig.1 and 3.

Relay one is equipped with a change-over contact.

Via the Modbus interface the two alarm thresholds and the hysteresis are freely adjustable at the PC within the measuring range.

The procedure can be read from the user manual Modbus Software.

The following parameters are factory set.

- Alarm threshold 1 = Relay 1: 19 vol %**
- Alarm threshold 1 = Relay 2: 17 vol %**
- Switching hysteresis: 1 vol %**

