



Display-version



O3 Wall



O3 Duct



Technical Data

Gas	Ozone O3
Detection principle	Electrochemical diffusion
Accuracy	0,1 ppm
Repeatability	<5% of reading
Long term output drift	<2% of signal loss/month
Response time	t90 <60 sec.
Mounting height	300mm above floor
Storage time	Max 3 months +5/+30C
Output signal	(0)4-20mA, load 500ohm
Selectable	(0)2-10Vdc, load 50kohm
Starting point	0/20% proportional
Relay 1	30Vac/dc, 0,5A, pot.free SPDT
Relay 2	Dito SPNO/SPNC
Consumption	30mA, max 0,8VA
Serial Interface	
Transciever	RS485/19200 Baud/9600 at Mod
Power supply	18-28Vac/dc,reverse polarity prot (2-wire mode only Vdc).
Power consumption	
Analogue	22mA, max (0,6VA)
Bus mode	12mA, max (0,3VA)
Expected lifetime	2 years normal operating enviro.
Humidity range	15-90% rH non-condensing
Operating range	-10 up to +45C
Rating	IP65 Protection Class
Temperature range	Atmospheric +/-15%

Features

- Digital measurement values
- Comfort calibration with selective access release
- Continuous monitoring
- Good stability to poisoning
- Low zero point drift
- Poisoning stable
- Long life sensor
- Modular plug-in technology
- Easy maintenance/calibration
- 2 relays output adjustable switching thresholds
- Manual addressing for RS485 mode. eg. Modbus

Description

O3 detector including digital measurement value processing and temperature compensation for the continuous monitoring of ozone concentration in the ambient air.

Integrated in the detector there is a comfortable calibration routine with selective access release..

For the detection of ozone within a wide range of industrial and commercial applications.

Ordering Codes

Manual calibration via potentiometer

O3 005	0--5ppm
O3 010	0-10ppm
O3 200	0-200ppm

Calibration and addressing by service Tool

O3 005T	0-5ppm
O3 010T	0-10ppm
O3 200T	0-200ppm

MOD	Protocol for Modbus
CUST	Protocol for customers specifications
GCD	Protocol for GCD-series
REL O3	Relay pack see rear side
DUCT	Duct Mounting
LCD	Two lines, 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
AIN	4-20mA analogue input
GAS 17	Calibration gas 17 liter
REG	Pressure regulator flow adjusted to 0,5 lit/min.

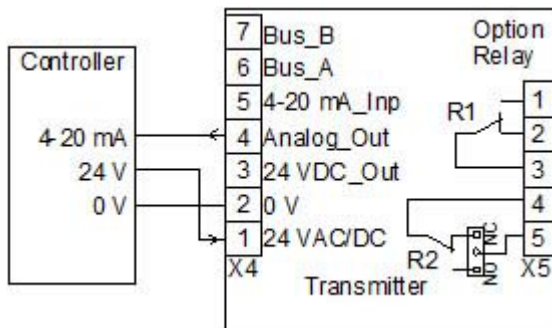
Warning devices See special datasheet

Warning signs See special datasheet

Physical Characteristics

Enclosure	Polycarbonate
Flammability	UL94: V2 Halogenfree
Enclosure colour	RAL 7032 (light grey)
Dimensions	94x130x57mm
Weight	Approx. 0,5kg
Installation	Wall mounting
Cable entry	Standard 1xM20
Wire connection	Screw type terminal min. 0,25mm ² and max 2,5mm ²
Wire distance	Current signal cirka 500m Voltage signal cirka 200m
Guidelines	EMV-Directive 89/336/EWG, CE EM-Directive 2004/108/EWG, CE
Warning Buzzer	85dV (distance 300m)
LCD Display	Two lines, each 16 characters
Heating	3C +/-2C, -30C, 18-28Vac/dc
Analogue input	4-20mA input resistance 200ohm Only for RS-485 mode
Power supply	Extern. transm. 24Vdc, max 50mA

Wiring



0Vdc: only with option

Relay Package

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

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.

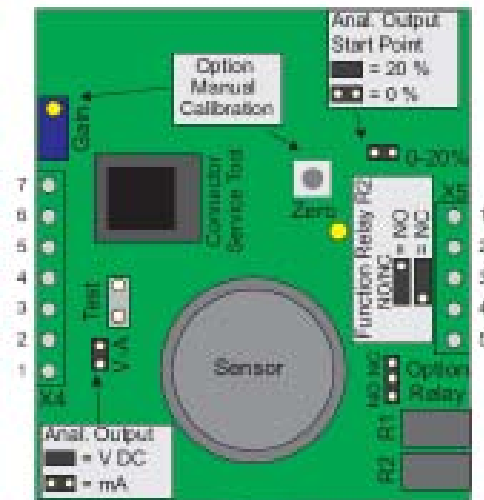
The procedure can be read from the user manual Modbus Software.

The following parameters are factory set.

Alarm threshold 1 = Relay 1: 5ppm

Alarm threshold 1 = Relay 2: 8ppm

Switching hysteresis: 1ppm

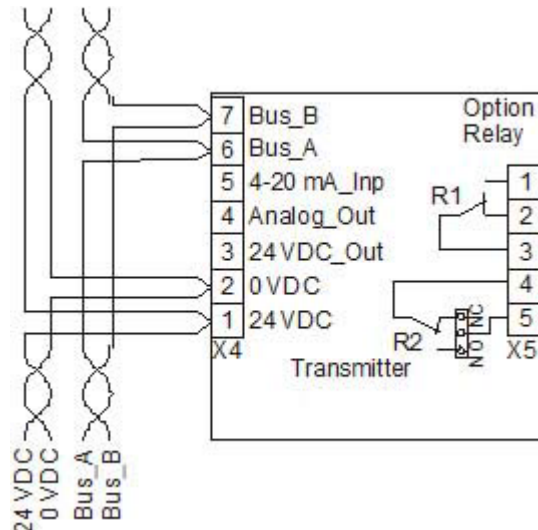


Cross Sensitivity

	Concentration(ppm)	Reaction (ppm)
Carbon Monoxide	200	0
Sulphur dioxide SO ₂	5	0
Nitrogen dioxide NO ₂	5	~5
Nitrogen Oxide NO	35	0
Hydrogen H ₂	200	0
Chlorine Cl ₂	5	~4
Ethylen ₂ C ₂ H ₄	100	0

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

GCD-05 Bus mode



Connection field bus and tension