



Carbon Monoxide Detector Analogue and Relay Output

CMD

Mar.10



CMD Wall



CMD Duct



Features

- Continuous monitoring
- Low zero point drift
- Poisoning stable
- Long life sensor
- Modular plug-in technology
- Easy maintenance/calibration
- Reverse polarity protected
- Overload protected
- 4-20mA loop-powered or 2-10Vdc output signal
- Relay package
- Duct mounting
- Integrated heating for less degree than specified operating range

Technical Data

Gas	Carbon Monoxide
Detection principle	Electrochemical, diffusion
Stability & resolution	+/- 3ppm
Repeatability	+/- 3% of reading
Long term output drift	<5% signal loss/year
Response time	t90 <50 sec.
Sensor coverage	465m2 to 930m2 "ideal conditions" assumed
Storage time	6 months
Mounting height	1,5 to 1,8 metres above floor
Output signal	
4-20mA	load < 500ohm overload and short circuit proofed
2-10Vdc	load < 50kohm overload and short circuit proofed
Relay 1	30Vac/dc, 0,5A, pot.free SPDT
Relay 2	Dito SPNO/SPNC
Power supply	18-28Vdc (reverse polarity prot.)
Power consumption	22mA, max (0,6VA)
Expected lifetime	5 years, normal operating envirom.
Humidity range	
Continuous	15-90% rH non-condensing
Short-time	0 to 99% rH non-condensing
Operating range	
Continuous	-10 up to +50C
Short-time	-20 up tp +50C
Rating	IP65 Protection Class
Pressure range	Atmospheric +/-10%

Application

For detection of carbon monoxide (CO) within a wide range of commercial applications such as vehicle exhaust in parking structures (e.g. underground garages) engine repair shops, tunnels equipment rooms and ventilation systems etc.

Due to the analogue signal 4-20mA and 2-10vdc the CO transmitter is compatible to any electronic analogue control, DDC/PLC control or automation system.

Ordering Codes

Relaypack

Wall Mounting

CMD 050C	0-50ppm	4-20mA	/R
CMD 100C	0-100ppm	4-20mA	/R
CMD 150C	0-150ppm	4-20mA	/R
CMD 200C	0-200ppm	4-20mA	/R
CMD 300C	0-300ppm	4-20mA	/R
CMD 400C	0-400ppm	4-20mA	/R
CMD 500C	0-500ppm	4-20mA	/R
CMD 1000C	0-1000ppm	4-20mA	/R

CMD 050V	0-50ppm	2-10Vdc	/R
CMD 100V	0-100ppm	2-10Vdc	/R
CMD 150V	0-150ppm	2-10Vdc	/R
CMD 200V	0-200ppm	2-10Vdc	/R
CMD 300V	0-300ppm	2-10Vdc	/R
CMD 400V	0-400ppm	2-10Vdc	/R
CMD 500V	0-500ppm	2-10Vdc	/R
CMD 1000V	0-1000ppm	2-10Vdc	/R

Duct Mounting (See rear side)

Cal 1	Calibration Kit for Tox-transmitters
Heat	Internal heating element 18-28Vac/dc 12VA
Buzz	Internal summer
Steel	Enclosure of sheet steel
Stain	Enclosure of stainless steel
Tool	Tool for opening holes in stainless steel enclosure

Ordering Codes

Duct Mounting

Ordering Code	CO Range	Output	Relay
CMD 050C	0-50ppm	4-20mA	/R
CMD 100C	0-100ppm	4-20mA	/R
CMD 150C	0-150ppm	4-20mA	/R
CMD 200C	0-200ppm	4-20mA	/R
CMD 300C	0-300ppm	4-20mA	/R
CMD 400C	0-400ppm	4-20mA	/R
CMD 500C	0-500ppm	4-20mA	/R
CMD 1000C	0-1000ppm	4-20mA	/R

Ordering Code	CO Range	Output	Relay
CMD 050V	0-50ppm	2-10Vdc	/R
CMD 100V	0-100ppm	2-10Vdc	/R
CMD 150V	0-150ppm	2-10Vdc	/R
CMD 200V	0-200ppm	2-10Vdc	/R
CMD 300V	0-300ppm	2-10Vdc	/R
CMD 400V	0-400ppm	2-10Vdc	/R
CMD 500V	0-500ppm	2-10Vdc	/R
CMD 1000V	0-1000ppm	2-10Vdc	/R

Relaypack

Relay Package

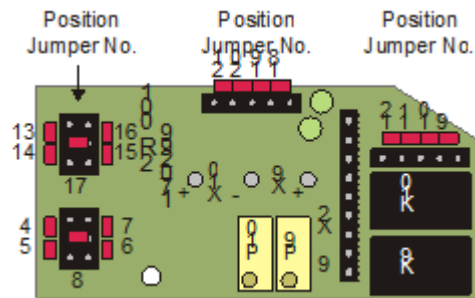
With the CMD relay package two potential-free contacts are available for the connection to external devices.

The switching thresholds of these relays are selectable via potentiometer in the range of 10 - 90% of CO concentration.

The hysteresis is programmable via jumpers.

Additionally the relay mode, open-circuit or closed circuit, is selectable.

The status of the two relays is displayed via LED



Connecting Diagram

