



CMD 300VC

### Technical data

<b>Sensor element</b>	Electrochemical, diffusion
<b>Output</b>	(0)4-20 mA, load < 500 ohm, (0)2-Vdc, load < 50 Kohm, overload and short circuit proof
<b>Power supply</b>	18-28 Vac/dc, (reverse polarity protected)
<b>Power consumption</b>	22 mA, max. (0.6 VA)
<b>Stability and resolution</b>	+/- 3 ppm
<b>Repeatability</b>	+/- 3% of reading
<b>Long term output drift</b>	< 5% signal loss/year
<b>Response time</b>	t90 < 50 seconds
<b>Sensor life expectancy</b>	5 years, normal operation environment
<b>Sensor coverage</b>	465 m2 to 930 m2 ("ideal conditions" assumed)
<b>Mounting height</b>	1.5 to 1.8 m above floor
<b>Humidity range</b>	
Continuous:	15 to 90% non-condensing
Short time:	0 to 99% non-condensing
<b>Temperature range</b>	
Continuous:	-10 to +50 °C
Short time:	-20 to +50 °C
<b>Storage temperature</b>	+5 to +50 °C
<b>Pressure range</b>	Atmospheric ± 10%
<b>Enclosure</b>	Plastic with M20 cable entry
<b>Dimensions</b>	H130 x W94 x D57 mm excluding cable entry
<b>Weight</b>	200 g
<b>Protection</b>	IP 65 for housing IP 65 for CO sensor element
<b>CE-approval</b>	EN 45544 part 1 to part 4

### Features

- Electrochemical sensor element
- 0-10 Vdc or 4-20 mA output, jumper selectable
- RS-485
- Relay output as option
- Overload protected
- Wide supply voltage range (18-28 Vdc)
- Reverse polarity protected
- Continuous monitoring
- Low zero point drift
- Positioning stable
- Long life sensor
- Modular plug-in technology

### Ordering

#### Carbon Monoxide (CO) Detectors with 0-10 Vdc or 4-20 mA Output

Type no.	ppm range
CMD 300VC	0 - 300 ppm
CMD 050VC	0 - 50 ppm
CMD 100VC	0 - 100 ppm
CMD 150VC	0 - 150 ppm
CMD 200VC	0 - 200 ppm
CMD 400VC	0 - 400 ppm
CMD 500VC	0 - 500 ppm
CMD 1000VC	0 - 1000 ppm
CMD 2000VC	0 - 2000 ppm

#### Important, please read before ordering:

The recommended storage life is up to 6 months unpowered.

CMD xxxVC are manufactured on request.  
As the storage life for CMD xxxVC is up to 6 months unpowered we need pre-payment before process the order, this to avoid any cancellation of order.

Delivery time is normally 3-4 weeks after receipt of payment.

## Description

CO detector CMD xxxVC including digital measurement value processing and temperature compensation for the continuous monitoring of the ambient air to detect carbon monoxide concentrations (CO).

Comfortable calibration routine with selective access release is integrated in the transmitter.

The CMD xxxVC possesses a standard analog output (0) 4-20 mA or (0) 2-10 Vdc, and an RS-485 interface. 2 relays with adjustable switching thresholds are available as an option.

## Application

For the detection of carbon monoxide (CO) within a wide range of commercial applications such as underground garages, tunnels, engine repair shops, loading bays, engine test benches, shelters, go-kart race courses etc.

Due to the standard analog signal the CO transmitter is compatible to DDC and PLC.

## Calibration

The CMD xxxVC is pre-calibrated.

The calibration interval is only depended from the local regulations.

We recommend a calibration interval of 3 years.

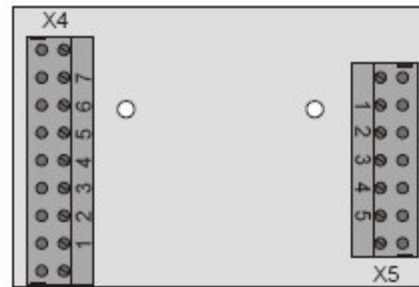
Calibration of zeropoint and gain with the service tool ST 03.

## Duct Mounting Set on request

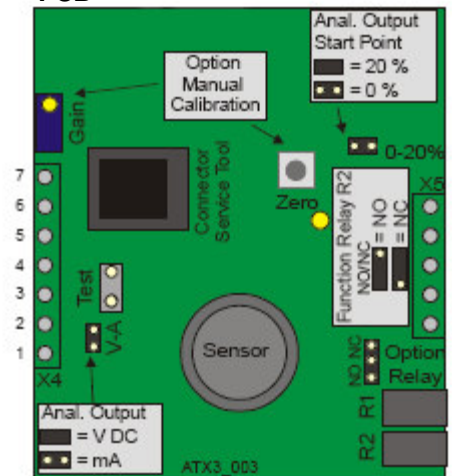


Duct Mounting Set DMS with detector CMD

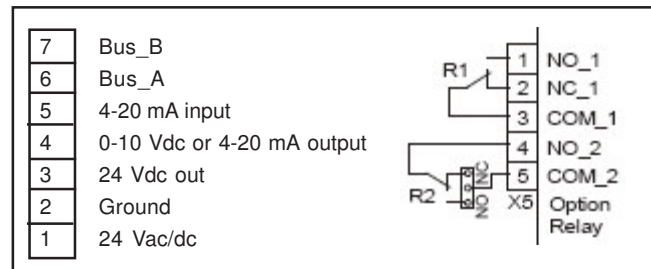
## Terminal Block



## PCB



## Wiring



Output 0-10 Vdc or 4-20 mA is jumper selectable on pcb.

Power supply can be 24 Vac or 24 Vdc for both 0-10 Vdc output and 4-20 mA output.

4-20 mA output is 2-wire (loop) connection on terminals 1 and 4.

0-10 Vdc is 3-wire connection on terminals 1, 2 and 4.

Relay outputs are options.

Wire connection on screw terminal min 0.25 mm<sup>2</sup> and max 2.5 mm<sup>2</sup>

Wire distance:

500m for 4-20 mA output and 200 m for 0-10 Vdc output.

We reserve the right to make changes in our products without any notice which may effect the accuracy of the information contained in this leaflet.