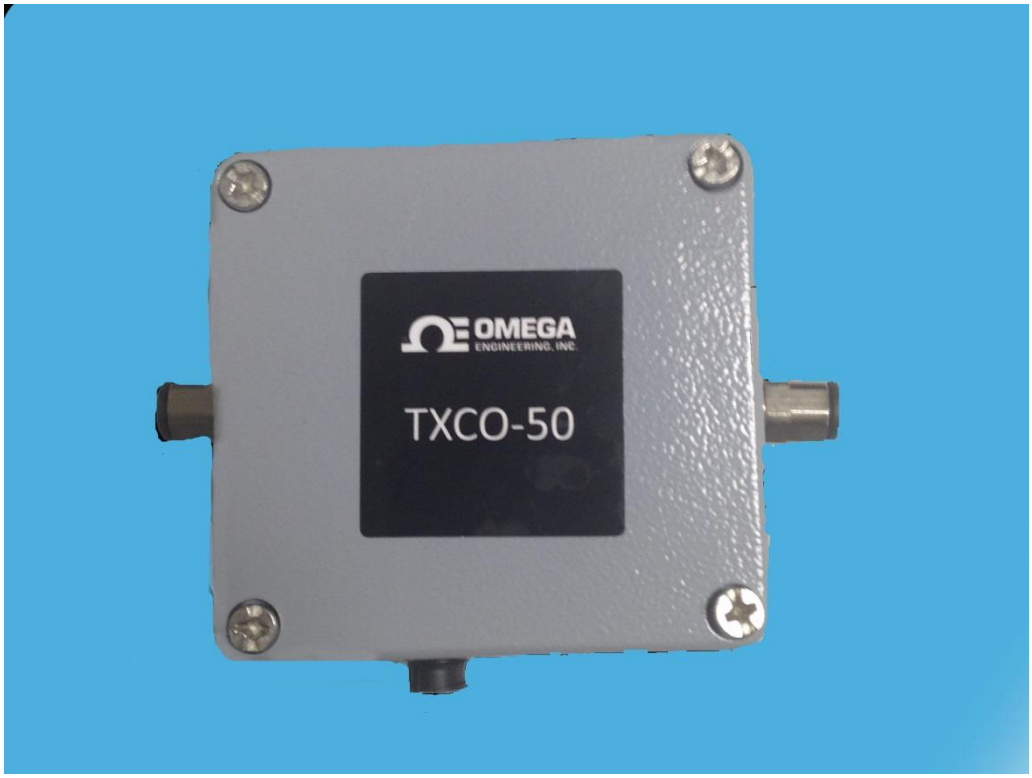
TXCO-50

Carbon Monoxide Operators Manual



Rev A
June 2016

MADE IN USA

1 YEAR WARRANTY

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STAMFORD, CT

ISO 9002 CERTIFIED CORPORATE QUALITY
MANCHESTER, UK

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Warnings

This instrument conforms to DIN57411 part 1 / VDE 041 part 1 "protective measures for electronic measuring instruments" and has left the factory in faultless condition. To maintain this condition and to guarantee harmless operation of the instrument, the user has to observe all warnings and directives of the manual.

Interruption of the protective grounding line or loosening the ground connection inside or outside the instrument may lead to dangerous situations. Disconnecting the ground is prohibited.

Disconnect power whenever electronic service is required. Care should be taken when opening or removing parts of the instrument; connectors may be under tension. Service should be performed by authorized personnel only.

If proper operation is not possible anymore, the instrument has to be disconnected from all power lines and measures should be taken to prevent inadvertent operation.

Safe operation is not possible:

- When the instrument has been visibly damaged during shipping or installation
- When the instrument does not function
- Exceeding storage temperature

Warranty

This equipment is sold subject to the mutual agreement that it is warranted by us free from defects of material and of construction, and that our liability shall be limited to replacing or repairing at our factory (without charge, except for transportation), or at customer plant at our option, any material or construction in which defects become apparent within one year from the date of shipment, except in cases where quotations or acknowledgements provide for a shorter period. Components manufactured by others bear the warranty of their manufacturer. This warranty does not cover defects caused by wear, accident, misuse, neglect or repairs other than those performed by Roscid or an authorized service center. We assume no liability for direct or indirect damages of any kind and the purchaser by the acceptance of the equipment will assume all liability for any damage which may result from its use or misuse.

We reserve the right to employ any suitable material in the manufacture of our apparatus, and to make any alterations in the dimensions, shape or weight of any parts, in so far as such alterations do not adversely affect our warranty.

Important Notice

This instrument provides measurement readings to its user, and serves as a tool by which valuable data can be gathered. The information provided by the instrument may assist the user in eliminating potential hazards caused by his process; however, it is essential that all personnel involved in the use of the instrument or its interface, with the process being measured, be properly trained in the process itself, as well as all instrumentation related to it.

The safety of personnel is ultimately the responsibility of those who control process conditions. While this instrument may be able to provide early warning of imminent danger, it has no control over process conditions, and it can be misused. In particular, any alarm or control systems installed must be tested and understood, both as to how they operate and as to how they can be defeated. Any safeguards required such as locks, labels, or redundancy, must be provided by the user or specifically requested of Roscid at the time the order is placed.

Therefore, the purchaser must be aware of the hazardous process conditions. The purchaser is responsible for the training of personnel, for providing hazard warning methods and instrumentation per the appropriate standards, and for ensuring that hazard warning devices and instrumentation are maintained and operated properly.

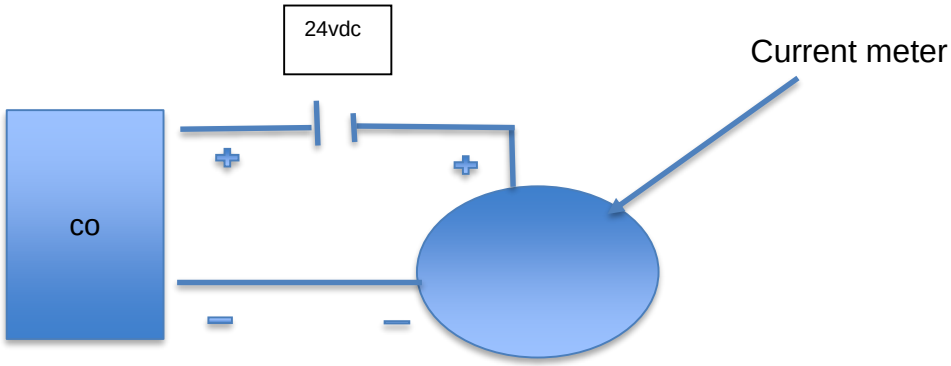
Roscid Technologies, the manufacturer of this instrument, cannot accept responsibility for conditions beyond its knowledge and control.
No statement expressed or implied by this document or any information disseminated by the manufacturer or its agents, is to be construed as a warranty of adequate safety control under the user's process conditions.

CO Range

The CO can be measured in the range of 0 – 50 ppm which corresponds to a 4-20mA ouput. This is a loop powered device.

Wires	Connection
Red	+24Vdc
Black	RTN

Wiring Diagram



Scaled 4-20mA loop powered = 0-50ppm

Flow

Recommended flow rate is 0.5-3 scfh
Flow rate direction for this CO unit is not applicable so it can be connected to either fitting. Use ¼" tubing for connecting to fittings. On output tube use at least 1-2 ft of tubing to prevent back draft

Stability (warm up time)

On Power up, allow 10 minutes for unit to stabilize (warm up time can vary depending on conditions)

Pressure Warning

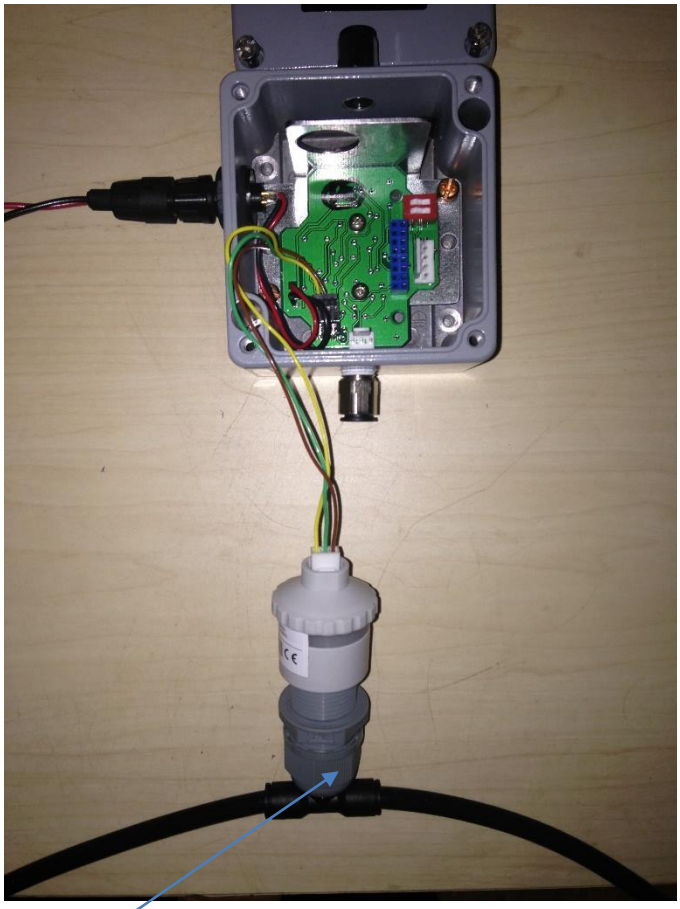
Do not exceed 1250mB

Sensor Operating Life

The CO sensor is an electrochemical sensor. Its sensor life expectancy is typically 2 years with a drift rate of < 5%/yr.
The drift can be corrected via calibration using a reference calibration gas if necessary

Calibrating the Transmitter
Equipment needed:

A CO Reference Gas of 25ppm
A TXCO-50-CK (calibration kit) including calibration instructions
A TXCO-50-RC (replacement CO sensor) (optional when replacing the CO sensor)



Calibration Kit

Specification of TXCO-50 Transmitter

Measuring Range	: 0 – 50 ppm CO
Calibration	: with calibration gas
Accuracy @ 25C	: +/-1 ppm- +/-3% of reading
Resolution	: 0.1 ppm
Response time	: 90 % of FSD At 25°C < 45 s
Operating Temperature	: 0 - 50°C
Sample pressure	: 600mB to 1250mB
Output signal	: 4 -20 mA/DC isolated
Flow rate	: 0.5 to 3 SCFH
Voltage	: 24 VDC
Sensor	: electro chemical sensor
Sensor warranty	: 1 year from dispatch, expected sensor life: minimum 2 years