HK INSTRUMENTS

CARBON MONOXIDE TRANSMITTERS CMT SFRIFS

INTRODUCTION

Thank you for choosing an HK Instruments CMT series carbon monoxide transmitter. CMT is an easy-to-use, reliable transmitter for detecting CO gas. It is commonly used to control ventilation in areas where high concentrations of CO may cause serious health problems.

The recommended transmitter calibration interval is one year.

WARNING A

- READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE OR SERVICE THIS DEVICE.
- Failure to observe safety information and comply with instructions can result in PERSONAL INJURY, DEATH AND/OR PROPERTY DAMAGE.
- To avoid electrical shock or damage to equipment, disconnect power before installing or servicing and use only wiring with insulation rated for full device operating voltage.
- To avoid potential fire and/or explosion do not use in potentially flammable or explosive atmospheres.
- Retain these instructions for future reference.
- This product, when installed, will be part of an engineered system whose specifications and performance characteristics are not designed or controlled by HK Instruments. Review applications and national and local codes to assure that the installation will be functional and safe. Use only experienced and knowledgeable technicians to install this device.

APPLICATIONS

CMT devices are commonly used in places where air includes CO gas emissions, such as:

- Commercial parking garages
- Apartment garages
- Tunnels and terminals
- Car and bus maintenance garages
- Warehouses and factories
- Car service centers

SPECIFICATIONS

Performance

Measurement range: 0...300 ppm CO Linearity: ≤2 % on 300 ppm CO Cross sensitivity: ≤2 % on 300 ppm CO Reproducibility: ≤3 ppm

Technical Specifications

Response time: <60 s Gas entry: by diffusion Measuring element: Electro-chemical Environment: Operating temperature: -10...40 °C Humidity: 15 to 95 % rH

Physical Case:

Dimensions: 90 x 95 x 36 mm Weight: 87 g Materials: Case: ABS Lid: PC Protection standard: IP54 **Electrical connections:** 2-pole screw terminal, max 1.5 mm² Cable entry: M16

Electrical

Supply voltage: 14...28 VDC Output signal: 4...20 mA, maximum load 300Ω

Conformance

Safety for sensor: TÜV-approval according to VDI 2053 R.F.I according to EN 50 081-1 resp. EN 50 082-2 B Meets the requirements for CE marking: EMC Directive: 2014/30/EU RoHS Directive: 2011/96/EU WEEE Directive: 2012/19/EU

COMPANY WITH MANAGEMENT SYSTEM CERTIFIED BY DNV GL = ISO 9001 = ISO 14001 =



DIMENSIONAL DRAWINGS



INSTALLATION

- 1) Mount the device in the desired location (see step 1).
- Recommended mounting height is 1.5...1.8 m above the floor. 2) Open the lid and route the cable through the strain relief and
- connect the wires to the terminal block(s) (see step 2).
- 3) The device is now ready to be used.
- $extsf{M}$ WARNING! Apply power only after the device is properly wired.

STEP 1: MOUNTING THE DEVICE

- 1) Select the mounting location. Recommended mounting height is 1.5...1.8 m above the floor.
- 2) Use the device as a template and mark the screw holes.3) Mount with appropriate screws.



Figure 1b - Mounting orientation



STEP 2: WIRING DIAGRAMS

For CE compliance, a properly grounded shielding cable is required.

- 1) Unscrew the strain relief and route the cable(s).
- 2) Connect the wires as shown in figure 2.
- 3) Tighten the strain relief.



RECYCLING/DISPOSAL

The parts left over from installation should be recycled according to your local instructions. Decommissioned devices should be taken to a recycling site that specializes in electronic waste.

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WARRANTY POLICY

The seller is obligated to provide a warranty of five years for the delivered goods regarding material and manufacturing. The warranty period is considered to start on the delivery date of the product. If a defect in raw materials or a production flaw is found, the seller is obligated, when the product is sent to the seller without delay or before expiration of the warranty, to amend the mistake at his/her discretion either by repairing the defective product or by delivering free of charge to the buyer a new flawless product and sending it to the buyer. Delivery costs for the repair under warranty will be paid by the buyer and the return costs by the seller. The warranty does not comprise damages caused by accident, lightning, flood or other natural phenomenon, normal wear and tear, improper or careless handling, abnormal use, overloading, improper storage, incorrect care or reconstruction, or changes and installation work not done by the seller or his/her authorized representative. The selection of materials for devices prone to corrosion is the buyer's responsibility, unless otherwise is legally agreed upon. Should the manufacturer alter the structure of the device, the seller is not obligated to make comparable changes to devices already purchased. Appealing for warranty requires that the buyer has correctly fulfilled his/her duties arisen from the delivery and stated in the contract. The seller will give a new warranty for goods that have been replaced or repaired within the warranty, however only to the expiration of the original product's warranty time. The warranty includes the repair of a defective part or device, or if needed, a new part or device, but not installation or exchange costs. Under no circumstance is the seller liable for damages compensation for indirect damage.