



TI2309en

Product Information**thermokon**
asia pacific**GDI1- Series (CO)****Carbon Monoxide Sensor
with Active Output**

The GDI1-Series (CO) is designed to measure the CO content in ducts

The Output can be selected (0...10V or 4...20mA)

The sensor operates with low power supply

The air quality sensor output is active

**Use**

Compatible to all common HVAC, DDC and Analog Controls systems, with/without Building Automation System

Air quality (CO) measurements in ducts

Used in all common HVAC applications

Used in Commercial and Industrial Buildings

Features

Sensor with active output

Selectable 0...10V and 4...20mA output

Professional and practical product design, withstands rough environmental conditions

Easy to use, install and maintain

Product Range

Order Code	Power Supply	Measuring Range	Sensor Output	Accuracy	Response Time	IP-Protection
GDI1.MB	AC/DC 24V (±10%)	0...100 PPM	0-10V and 4...20mA	±5%, full scale	< 1min.	IP54 to IEC60529
GDI1.NB		0...400 PPM				

Sensor Specification	Sensor Specification	Measured	Gases CO
		Sensor Characteristics	Active
		Sensor Accuracy	±5%, full scale
		Sensor Element Life	7-10 years
		Resonse Time	< 1min.
		Accurracy Check	recomented every 3 years
		Sensor Output (s)	0...10V / 4...20mA
		Measuring Range (s)	See Product Range, Page 1
Technical Information	Electrical Information	Power Supply	AC/DC 24V (±10%)
		Frequency	50 / 60 Hz at AC 24V
		Output Load	≤500Ω (current), ; ≥2kΩ (voltage)
		Terminal Clamp	Screw terminal, max. 1.5mm ²
		Power Consumption	24V; 1.2W / 2.2VA
	Mechanical Information	Cable Entry	ABS, PG9
		Sensing Element Position	Inside the housing
	Color and Materials	Housing Cover	ABS, Light Grey
		Housing Bottom	ABS, Light Grey
	Environmental Conditions	Operation Temperature	-25°C...+70°C
		Operation Humidity	<85% r.h., no condensation
		Transport Temperature	-35°C...+70°C
		Transport Humidity	< 90% r.h.
		Storage Temperature	-10°C...+70°C
		Storage Humidity	< 85% r.h., no condensation
	Norms and Directives	IP- Rating	IP54 to IEC60529
		Safety Class	III to EN 60 730
		Product Standard 1	Automatic Electric. Controls for household and similar use
		Product Standard 2	2009/EN 60 730-1
		CE Conformities to	2004/108/EG Electromagnetic Compatibility EMV
		CE Electromagnetic Compatibility Emitted Interference	2000/EN60730-1 Emitted Interference
		CE Electromagnetic Compatibility Interference resistance	2000/EN60730-1 Interference Resistance
		RoHS Compatibility	RoHS 3, Directive 2015/863
		Operation Climatic Condition	IEC 60 721-3-3
		Operation Mechanical Condition	IEC 60 721-3-2 to class2M2
		Transport to Climatic Condition	IEC 60 721-3-2
		Transport Mechanical Condition	IEC 60 721-3-2 to class2M2
Storage Climatic Condition		IEC 60 721-3-1	
Storage Mechanical Condition		IEC 60 721-3-1 to class2M2	
Miscellaneous	Accessories	None	
	Shipping & Handling	Minimum Order	1 box with 1 piece
		Package Material	Rigid Cardboards Packaging
	Order Notes	Order Code	e.g. GDI1.MB

Installation Notes

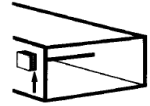
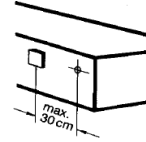
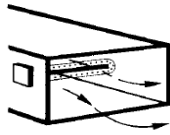
Observe the following general regulation for engineering and implementation:



- All relevant national and heavy power regulation
- Other country specific regulations
- Country-specific regulations
- Local electrical supply authority regulation
- Schematics, cable listings, dispositions, specification and arrangements from the customer or engineering office in charge
- Third party specifications, e.g. general contractors or constructors

Advices

Mounting Advices



Disposal Notes

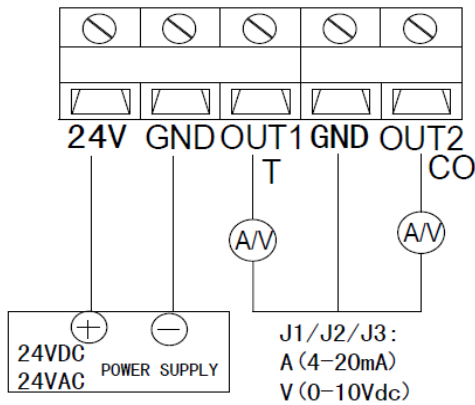
The device is considered an electronic device for disposal in terms of the EUROPEAN DIRECTIVE 2012/19/EU.



- The device may not be disposed as domestic garbage.
- The device must be disposed through channels provided for this purpose.
- It is mandatory to complying with local currently applying laws and regulations.

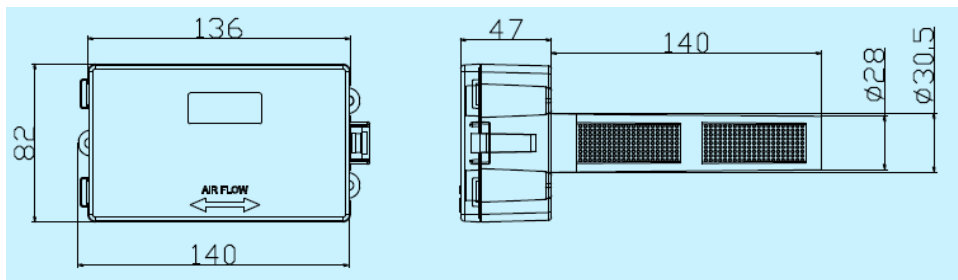
Connection

Terminal Connection



Note: All 3 Jumper have to be set. All have to be either 0...10V or 4...20mA

Dimensional Drawing



Mounting Instruction

