

Hexane, Combustible gas Fieldbus Detector - ModBus, BacNet





Features

- Digital measurement value processing incl. temperature compensation
- Internal functional control with integrated Hardware Watchdog
- Data / measured values in µC Sensor, therefore simple exchange of sensor uncalibrated <> calibrated
- Software according to SIL2 compliant development process
- Modular technology (plug-in and replaceable)
- Easy maintenance and calibration by exchange of the sensor cartridge or by comfortable on-site calibration
- Serial RS 485 interface with protocol for CGD06 Modbus and BacNet.
- IP 65 version

Technical Data

Electrical

Power supply 16 – 29 Vdc, reverse-polarity pro-

Power consumption 10 mA (0.24 VA), 24Vdc **Output for GCD bus** 5 Vdc, 250 mA max.

Overload, short-circuit and reverse-

polarity protected

Mounting height

General

Temperature range -20 °C to +50 °C (-31 °F to 122 °F) **Humidity range** 15 - 90 % r.H non-condensing Storage temperature 5 °C to 30 °C (41 °F to 86 °F)

Storage time 6 months

Serial interface

GCD bus 1-wire / 19200 Baud Field bus RS 485 / 19200 Baud 2-wire / 19200 Baud **Tool bus** Mounting height 0.2 m above floor

Physical

Wire connection:

Field bus Screw-type terminal min. 0.25 mm²,

max. 2.5 mm²

Local bus for sensor 3-pin connector

Directives EMC directives 2004/108/EC

Conformity to: EN 50271 EN 61010-1:2010 ANSI/UL 61010-1

CAN/CSA-C22.2 No. 61010-1

Housing 90 x 130 x 57 mm

Application

The Fieldbus Detector is used for integration in bus network.

Design Features

The detector provides the power supply of the sensors and makes the measured data available for digital communication.

Communication with the CGD06 controller takes place via the RS 485 fieldbus interface with CGD06 protocol.

Other communication protocols as Modbus and BacNet for direct connection to superordinate BMS are available.

The sensor is connected to the local bus via a plug connection enabling simple exchange instead of an on-site calibration.

The internal X-Change routine recognizes the exchanging process and the exchanged sensor and starts the measurement mode automatically.

An LED indicates the correct procedure of the exchange operation.

As an alternative, the on-site calibration via the CGD06 Service Tool can be performed with the integrated, comfortable calibration routine.

Ordering Codes

BHEX 100M	ModBus	0-100% LEL 16-29Vdc
BHEX 100B	BacNet	0-100% LEL 16-29Vdc
BHEX 100C	CGD-bus	0-100% LEL 16-29Vdc
XHEX 100	Sensor	0-100% LEL for exchange (3 years)

BBUZ Built-in buzzer

BBUZ LED Buzzer with built-in LED indication

BDUCT Duct Kit



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BHEX

Pressure regulator, flow adjustment to 0.5 l/min

Combined Warning Horn/Flashlight with reset

Flashing gas alarm plate "GASALARM" 24Vac/dc

Power supply 24Vdc Option, stainless housing

Calibration Gas 17 liter

Calibration Kit

Mar. 16

Technical Data	Sensor	Ordering Codes, cont'd	
Electrical		DR 24/30	Power supp
Power supply	5 Vdc from sensor board, reverse polarity protected	BSTAIN	Option, stai
Power consumption:	200 mA, max. (1.0 VA)	REG	Pressure reg
Serial interface local bus	1-wire / 19200 Baud	GAS	Calibration (
		GKIT	Calibration I
Sensor element	Pellistor (catalytic bead sensor)	Alama Haita	
Measuring range	0 – 100 % LEL	Alarm Units	
Accuracy	± 1 % LEL	AAW 24	Warning Ho
Resolution	0.2%	AAW 230	Warning Ho
Repeatability	< 1 % sig.	OA 24	Flashlight 24
Response time t ₉₀	10 sec.	OAW 24	Combined V
Zero point variation	0.5 %	OAW 230	Combined V 98dB
Long-term zero-point drift	< 0.3 % LEL / month	OAW 24T	Combined V
Long-term sensitivity drift	< 1 % LEL / month		button, 24V
Temperature range	-20 to +50 °C (-4 to 122 °F)	Warning Plate	
Humidity range	5 - 95 % r.H non-condensing	Gas Alarm	Flashing gas
Pressure range	Atmospheric ± 20 %		
Sensor life time	> 36 months / normal ambient conditions		
Calibration interval ¹	6 months		
Storage temperature	+ 5 to + 30 °C (41 to 86 °F)	Set-up and Standard Ala	
range Storage time	6 months	 0 - 100% LEL Early alarm level set at 10 Emergency alarm level set Special protection for people of factured in accordance with the EN50545.	
Poisoning	The sensitivity of Pellistor sensors can be influenced by substances containing silicon compounds and even poisoned and destroyed by them.		
Warranty	1 year on material (without sensor		

¹ Manufacturer-recommended calibration interval for normal environmental conditions.

element)

its Warning Horn 24Vdc 98dB Warning Horn 230Vac 98dB Flashlight 24Vdc, red Combined Warning Horn/Flashlight, 24Vdc 98dB Combined Warning Horn/Flashlight, 230Vac 98dB

button, 24Vdc 98dB

and Standard Alarm Levels

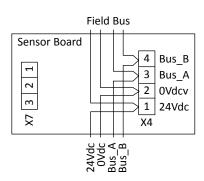
- alarm level set at 10% LEL
- rgency alarm level ser at 20% LEL

rotection for people and buildings. The units are manuin accordance with the rules and directives such as

Products delivered by the AP meets and exceeds the requirements of the new European standard EN50545.

Safety functions control devices for connection warnings regarding functionality and open circuit - day and night. Level SIL2 according to EN 50271.

Electrical connection



We cannot be held responsible for errors in the manual/datasheet and reserve the right to correct any errors and to make product improvements, which may affect the accuracy of the manual/datasheet, without prior notice.