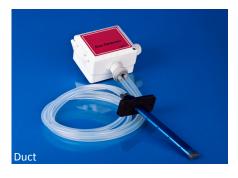


n-Butane, Combustible gas Fieldbus Detector - ModBus, BacNet

BBUT





16 - 29 Vdc, reverse-polarity pro-

Overload, short-circuit and reverse-

10 mA (0.24 VA), 24Vdc

5 Vdc, 250 mA max.

polarity protected

tected

Technical Data

Electrical

Power supply

Power consumption Output for GCD bus

General

-20
15 -
5 °C
6 m
1-w
RS 4
2-w
0.2
Scre
max 3-pi
EMC CE Con EN 5 EN 6

-20 °C to +50 °C (-31 °F to 122 °F) 15 - 90 % r.H non-condensing 5 °C to 30 °C (41 °F to 86 °F) 6 months

1-wire / 19200 Baud RS 485 / 19200 Baud 2-wire / 19200 Baud

0.2 m above floor

Screw-type terminal min. 0.25 mm², max. 2.5 mm² 3-pin connector EMC directives 2004/108/EC CE Conformity to: EN 50271 EN 61010-1:2010 ANSI/UL 61010-1 CAN/CSA-C22.2 No. 61010-1 90 x 130 x 57 mm

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

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					
BBUT 100M	ModBus	Butan 0-100% LEL 16-29Vdc			
BBUT 100B	BacNet	Butan 0-100% LEL 16-29Vdc			
BBUT 100C	CGD-bus	Butan 0-100% LEL 16-29Vdc			
XBUT 100	Sensor Head	0-100% LEL for exchange (3 years)			
BBUZ	Built-in buzzer				
BBUZ LED	Buzzer with built-in LED indication				
BDUCT	Duct Kit				

Housing



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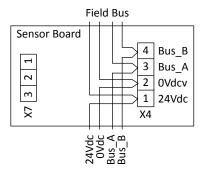
BBUT

Technical Data	Sensor	Ordering Codes, cont'd		
Electrical		DR 24/30	Power supply 24Vdc	
Power supply	5 Vdc from sensor board, reverse polarity protected	BSTAIN	Option, stainless housing	
Power consumption:	200 mA, max. (1.0 VA)	REG	Pressure regulator, flow adjustment to 0.5 l/min	
Serial interface local bus	1-wire / 19200 Baud	GAS	Calibration Gas 17 liter	
Sensor element		GKIT	Calibration Kit	
Sensor element	Pellistor (catalytic bead sensor)			
Measuring range	0 – 100 % LEL	Alarm Units		
Accuracy	± 1 % LEL	AAW 24	Warning Horn 24Vdc 98dB	
Resolution	0.2%	AAW 230	Warning Horn 230Vac 98dB	
Repeatability	< 1 % sig.	OA 24	Flashlight 24Vdc, red	
Response time t _{an}	10 sec.	OAW 24	Combined Warning Horn/Flashlight, 24Vdc 98dB	
Zero point variation	0.5 %	OAW 230	Combined Warning Horn/Flashlight, 230Vac 98dB	
Long-term zero-point drift	< 0.3 % LEL / month	OAW 24T	Combined Warning Horn/Flashlight with reset	
Long-term sensitivity drift	< 1 % LEL / month		button, 24Vdc 98dB	
Temperature range	-20 to +50 °C (-4 to 122 °F)	Warning Plate		
Humidity range	5 - 95 % r.H non-condensing	Gas Alarm	Flashing gas alarm plate "GASALARM" 24Vac/dc	
Pressure range	Atmospheric ± 20 %			
Sensor life time	> 36 months / normal ambient conditions			
Calibration interval ¹	6 months			
Storage temperature range	+ 5 to + 30 °C (41 to 86 °F)	Set-up and Standard Alarm Levels		
Storage time	6 months	 0 - 100% LEL Early alarm level set at 5% LEL Critical alarm level set at 10% LEL Emergency alarm level ser at 20% LEL Alarm levels recommended by AP normally lower than those stipulated by EN378		
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 element)	Special protection for people and buildings. The units are manu- factured in accordance with the rules and directives such as		

EN50545.

¹ Manufacturer-recommended calibration interval for normal environmental conditions.

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.



Products delivered by the AP meets and exceeds the requirements

Safety functions control devices for connection warnings regarding

of the new European standard EN50545.

Level SIL2 according to EN 50271.

functionality and open circuit - day and night.