



Instruction and Program manual

CANline

Alarm and Control system



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1 Warranty

KIMESSA AG guarantees the quality of all its products. This warranty is only valid within the warranty period and during normal operation of the products as specified in the individual product data sheets or as specified in the manuals.

KIMESSA will repair and / or replace every part within the warranty period free of charge.

KIMESSA will determine the nature of the failure and will decide whether it will be repaired/replaced under guarantee. Damaged or broken parts must be returned to KIMESSA AG, Switzerland or to your local distributor prepaid. Excluded from warranty are sensors that have been exposed to gases or vapours that may have poisoned or disturbed the sensor.

Warranty is limited to the value of the goods delivered. The customer is responsible for improper use and operation by its employees or other personnel.

2 Introduction

The KIMESSA CANline Gas alarm and Control system has been designed to protect people from poisonous or flammable gases as well as to reduce the energy consumption of ventilation systems in underground parking garages. Up to 32 sensors, 6 external relay cards and unlimited displays can be connected to the string of the CANline monitor. A pre-programmed switching mode for periodic switch on/off will be activated as soon as the internal clock is switched on.

All electric components and boards are built in a stable housing. All controls are on the front of the housing, protected by a waterproof foil.

The highest concentration will be shown, provided alarm is activated. As soon as one or more alarm levels are exceeded, the display will show the channels (sensor) with the alarm connections sequential, each channel will be shown for 4 seconds.

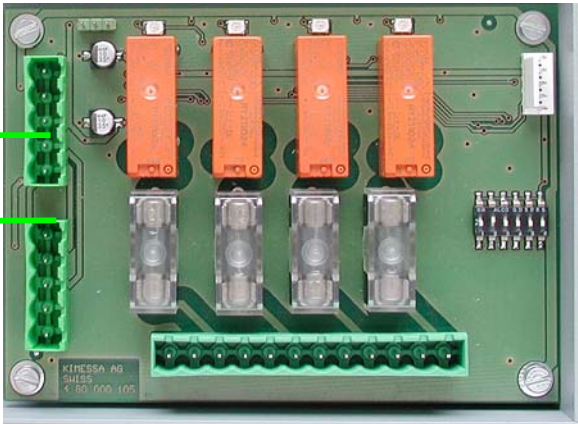
Programming of the system will be done by your local distributor or KIMESSA at first start up.

3 Wire connection



Monitor CANline

Relay card, up to max. 6 pcs.



3x2x0,5mm² STP or FTP

External Display



Sensor, maximum 32.

4 Front view, dimensions and control elements

Dimensions:

Height 218 mm

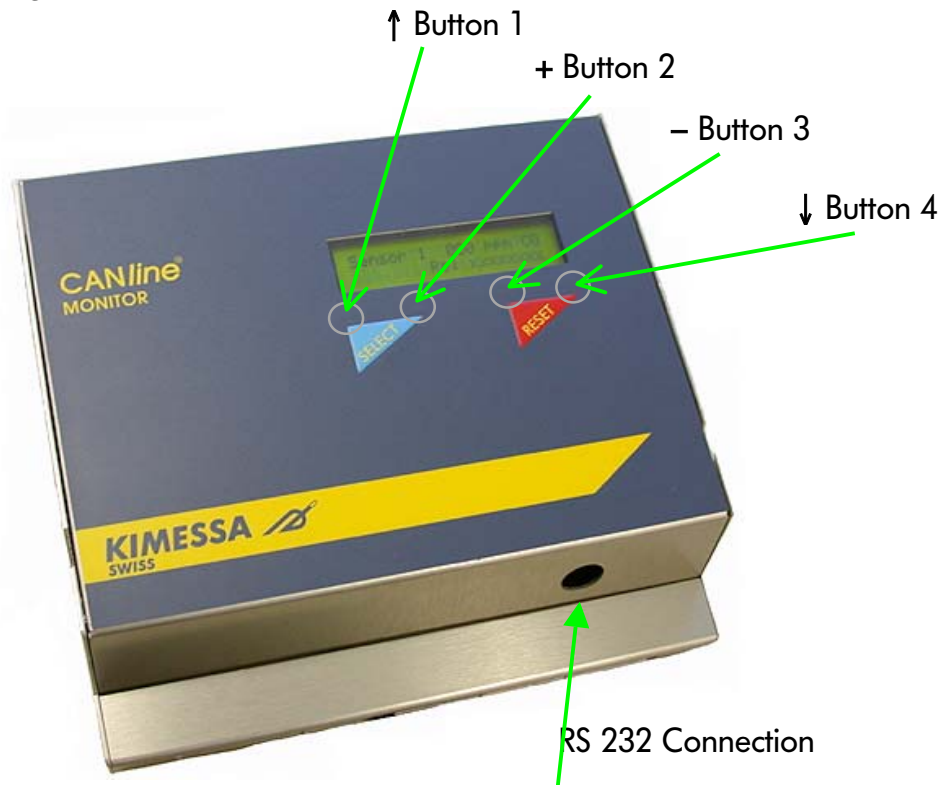
Width 230 mm

Depth 63 mm

Weight 2.70 kg

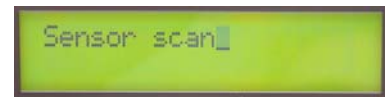
Invisible buttons:

Display lighting
extinguishes after
20 Min.



5 Display

5.1 Sensor display



Display Sensor scans
(Normal operation)

In this display mode, the actual gas concentrations of all sensors will be shown sequential. (See par. 6.6)

Display of selective Sensors

By pushing on the "SELECT" button, the display will show "sensor x". The correct sensor could be selected with the "SELECT" button and will be confirmed with the "RESET" button. The display will show the selected sensor until the "RESET" button is pushed again.

Display of sensor with highest concentration.

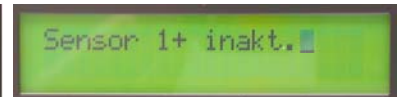
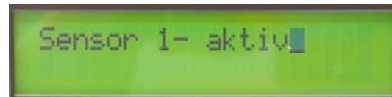
By pushing the 'RESET' button in the scan mode, the sensor with the highest concentration will be displayed.

6 Front control



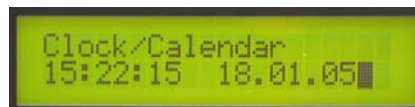
6.1 Sensor selection

By pushing the invisible button 4 once (to the right and above reset button), first sensor selection is shown (number of sensor connections, basic program: 4 sensors pre-programmed). The number of connected sensors can only be programmed by your local distributor or KIMESSA.



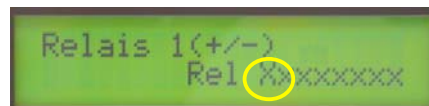
6.2 Sensor active/ inactive

By pushing button 4 twice, the display will show, "sensor active". The "SELECT" button will select the sensor. It can be made active or inactive, by pushing the invisible + or - button; don't forget to confirm your choice with the "RESET" button. All alarm values and error displays are suppressed in the inactive mode.



6.3 Hour and Date

Pushing the invisible button 4, 3 times, the display will show clock / calendar. These values can be changed by pushing the 'SELECT' button and must be confirmed with the reset button.



6.4 Relay-Test

Pushing button 4, 4 times and then the select button, relays can be switched on or off with the invisible + and - button. In this mode, it is possible to test the external equipment.

You can leave the relay test mode by pushing the "RESET" button. All relays will return in normal mode.

6.5 RESET

The "RESET" button will reset all relays after an alarm, provided they were programmed in the hold mode.

By pushing the reset button for 20 sec. all connected sensors will be made inactive. After 4 hours all sensors will be automatically made active again and the system will be in its normal operation mode.

6.6 SELECT

By pushing the 'SELECT' button once "sensor scan" is shown. By pushing the 'SELECT' button a number of times, a particular sensor can be selected, confirm with reset button. The display will show the selected sensor continuously until the 'RESET' button is pushed again and the sensor with the highest gas concentration is displayed.

11 Bus-End-resistor

When the end of the serial string is connected to the CANline monitor, the end resistor (under the cover), the jumper should be adjusted to pos "on".

However if the monitor is in the middle of the string, both jumpers of the first and the last sensor (or relay card or external display) will be placed to the "on" position. In this case the end resistor in the CANline must be set to position "off" The jumper is in position "off" in every other sensor, card or display.

12 The power supply

The advised power supply is 24 VDC/ 100A. Enough to feed the maximum of 32 sensors.

12.1 Sensor-Cable

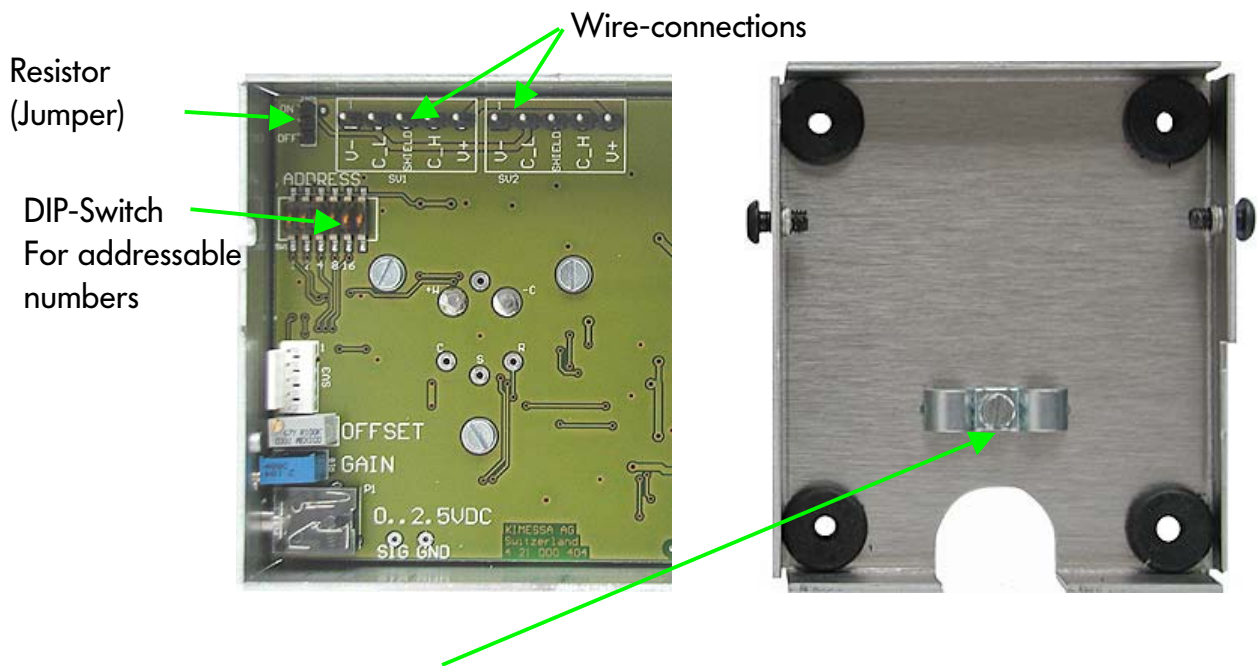
Recommended cable: 3x2x0,5mm² STP or FTP.

Data transmission is guaranteed up to 1000m.

13 Start up!

1. Remove all sensors from the string by removing the terminal block inside each sensor.
2. Remove the power supply from the string and test the 24VDC output of the power supply.
3. If this voltage is correct, re-connect the string and measure the output of the power supply again to see if there is a short circuit in the string.
4. The data can be tested with the data-wire tester. Connect the tester to the terminal block of the first sensor before connecting the sensor itself. You will see a green led when the power supply is correct, when second led light up every 8 seconds the data connection is correct as well.
5. The sensor needs a dipswitch code. This must be unique address.
You can find the dipswitch numbering of the sensors in chapter 13.1. Remember to place the resistor jumper to the position "on" for the last sensor in the string.

CO-Sensor GSEC 504

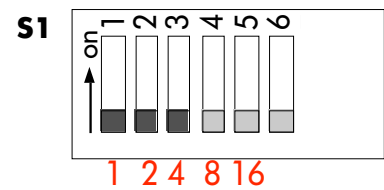


**The shielding should be connected to this point.
The wiring should be at least 10cm long.**

13.1 Addressing the sensors

S	Dip-Switch position				
	S1	S2	S4	S8	S16
1	on	off	off	off	off
2	off	on	off	off	off
3	on	on	off	off	off
4	off	off	on	off	off
5	on	off	on	off	off
6	off	on	on	off	off
7	on	on	on	off	off
8	off	off	off	on	off
9	on	off	off	on	off
10	off	on	off	on	off
11	on	on	off	on	off
12	off	off	on	on	off
13	on	off	on	on	off
14	off	on	on	on	off
15	on	on	on	on	off
16	off	off	off	off	on
17	on	off	off	off	on
18	off	on	off	off	on
19	on	on	off	off	on
20	off	off	on	off	on
21	on	off	on	off	on
22	off	on	on	off	on
23	on	on	on	off	on
24	off	off	off	on	on
25	on	off	off	on	on
26	off	on	off	on	on
27	on	on	off	on	on
28	off	off	on	on	on
29	on	off	on	on	on
30	off	on	on	on	on
31	on	on	on	on	on
32	off	off	off	off	off

Dipswitch in Sensor



⊗ the numbers are on the print and not on the dipswitch block!

14 Accessories

14.1 External Display

For the remote view of the alarm and malfunction, the remote display will be connected to the direct string. With the dipswitch SW1, you can decide which alarm level onwards the display can be activated. You can add an unlimited amount of displays, as necessary.



Standard display view without exceeded alarm level.



Display view in case of alarm.

14.2 Connection Box

The connection box is for 4-20 mA sensors like the diesel smoke sensor ARP-1. The connection box converts the analogue signal into a digital signal so that sensors outside the CANline range can be connected to the CANline monitor as well!!!

15 Technische Daten ● Données techniques ● Technical data ● Dati tecnici

Messbereich	0..100/0..250/0..500/0..1000	ppm / UEG
Champs de mesure	0..100/0..250/0..500/0..1000	ppm / LEL
Range	0..100/0..250/0..500/0..1000	ppm / LEL
Campo di misura	0..100/0..250/0..500/0..1000	ppm / LEL
Anzahl Messfühler	32	Signal Digital
Nombre de capteurs	32	Signale Digital
Number of sensors	32	Signal Digital
Numero di rivelatori	32	Signale Digital
Alarmausgänge	8 (1 Amp. 250 VAC)	Out 1..8 Relais pot.frei Umschaltkontakt
Sortie d'alarme	8 (1 Amp. 250 VAC)	Out 1..8 Relais exempt de pot.
Alarm outputs	8 (1 Amp. 250 VAC)	Out 1..8 Relays pot. Free
Uscita alarme	8 (1 Amp. 250 VAC)	Out 1..8 Relé, libero pot.
Störung	Anzeige „Err“ inkl. 1 Relais	Anzeige auf LCD-Display
Dérangement	Indicateur „Err“ incl. 1 Relais	Indicateur sur LCD-Display
Fault	Indication „Err“ incl. 1 Relay	Shows on LCD-Display
Disturbo	Indicazione „Err“ incl. 1 Relais	Indicazione su LCD-Display
Akustische Signalisierung	Summer	Konstanter Summton
Signalisation acoustique	Ronfleur	Constante ment roulant
Acoustic signal	Buzzer	Constant buzzing
Segnalazione acustica	Cicalino	Constantemente vibrante
Rückstellaste	RESET	Rückstellung Out 1...8
Touche d'acquittement	RESET	Remise à zéro Out 1...8
Cancellation key	RESET	Manual resetting Out 1...8
Bottone disattivante	RESET	Disattivante manuale Out 1...8
Prüfen/ Essai/ Test/ Prova	TEST	Manuelle Relaischaltung
Stromversorgung	19 VAC 50...60 Hz, ± 10 %, 150 mA	
Alimentation	19 VAC 50...60 Hz, ± 10 %, 150 mA	
Main supply	19 VAC 50...60 Hz, ± 10 %, 150 mA	
Alimentazione	19 VAC 50...60 Hz, ± 10 %, 150 mA	
Netzsicherung	T 2 A 250 VAC	Ø 5 x 20 mm
Fusible alimentation	T 2 A 250 VAC	Ø 5 x 20 mm
Main fuse	T 2 A 250 VAC	Ø 5 x 20 mm
Fusibile alimentazione	T 2 A 250 VAC	Ø 5 x 20 mm
Gewicht / Poids / Weight / Peso	2,15 kg	
Masse	H 218 x B 230 x T 63 mm	
Dimensions	H 218 x L 230 x P 63 mm	
Dimensions	H 218 x B 230 x D 63 mm	
Dimensioni	H 218 x L 230 x P 63 mm	
Farbe	Pulverbeschichtet RAL 7001	
Couleur	RAL 7001	
Coloured	RAL 7001	
Colore	RAL 7001	