

SAFETY INSTRUCTIONS
For INSTALLERS and OPERATORS of GASWARNING DEVICES

Status 11/1998

VN 10 45 98

Hazardous Nature of the Devices

The safety equipment manufactured or sold by us are manufactured technically and safely according to the state of technology and to the recognized safety regulations and comply with the relevant regulations of the professional associations, the labor inspectorates, the TÜV and the occupational medicine.

The devices are tested regarding to its function and safety before delivery.

When properly used, the units are operationally reliable.

The devices may only be operated in good order and condition in accordance with the Operating Instructions.

Incorrect operation or misuse can endanger:

- life and limb of the operator,
- the units and other property of the user,
- the function of the devices

Approved Operators

All those who are involved with the installation, commissioning, operation, servicing and maintenance of equipment, must be:

- appropriately qualified,
- the operating instructions and
- the recognized rules for occupational health and safety precisely observed

The units may be installed only by qualified personnel and put into operation. Work on the electrical parts must be performed by a qualified VDE-approved electrician.

Trainees must be supervised by an experienced person on the products.

The system installer must be made the operating instructions available to the operator.

Installers and operators must have read and understood these safety instructions before starting their activities

Minimum age for operators is 16 years.

Intended Use

The devices of the series GAZ / GDZ / GCZ / GDS / GCS are generally suitable only for monitoring the lower explosive limit of gases and vapors in the air in normal rooms without explosion zone and without special regulations for the use of a gas detection system.

The devices of the series CCZ / CCS are suitable for monitoring the air for toxic carbon monoxide concentrations in underground car parks.

They also meet the requirements of VDI guideline 2053/04.

Important:

It is not absolutely mandatory that gaswarning devices must always be subjected a metrological function test.

If regulations for the use of a gas detection system for some reason are required by the authority - Insurance - Engineering office – Builder-owner - Professional Association, only such devices are used, which meet the general requirements of the professional associations and a metrological **function test** from a recognized body to obtain a PFG number. These devices are clearly marked and must use appropriate inspection plate.

The approval covers

- testing the sensor on its function
- testing the evaluation unit on its function
- testing of both parts as a unit

To be sure, it is recommended to confirm in writing by the insurance the use of a unit without PFG number.

Important for use in EX-zones:

In hazardous locations **only explosion-proof measuring heads** with a Certificate of EC of approved testing laboratories must be used for the use in hazardous areas.

This certificate does not judge about the function, but only that the measuring head is explosion-proof.

In the certificate are prescribed no special conditions for safe operation of the measuring head, the measuring head can be operated at any convenient evaluation unit.

However, related evaluation units must be mounted outside the ex-zone.

The evaluators units are neither suitable nor approved for use in hazardous areas.

When using the device, the local conditions must be respected. The technical data corresponding environmental conditions for the operation of equipment must be observed.

Any other use is not according to regulations!

Important!

The sensors must be placed as close as possible to the sources, where is to expect a leakage of gases and vapors.

Gases and vapors, which are heavier than air, the sensor must be mounted close to the ground (lowest point).

For monitoring of gases, which are lighter than air, the sensors must be mounted at the highest point.

The sensors and evaluation devices must not be come in contact with water; otherwise an immediate review of the devices is necessary.

Opening the sensor in potentially explosive areas is only allowed after a period of 5 minutes after the power supply was interrupted! Otherwise, sparks formation could cause deflagration, fires or explosions.

Unauthorised conversions and modifications of the product lead to significant safety risks and are prohibited for safety reasons.

The manufacturer is not liable for damages resulting from not intended use.

Disturbances may affect the safety. They must be eliminated immediately!

Electrical Connection

WARNING!

Mains voltage (230V, 50Hz) causes severe burns, which can kill you.

Electrical work should only be carried out by a trained electrician.

Assemble only in voltage-free state!

Please observe the VDE regulations, the accident prevention regulations and the operating instructions for the devices.

Commissioning

Prior to commissioning, you should check that all conditions are met for a trouble-free operation.

- Is mounted the evaluation unit the sensors as well
- Are the devices accessible and visible
- Are the environmental conditions permissible for the commissioning and operation
- Are the devices connected correctly
- Do the necessary connection values corresponds to the power supply

After commissioning a function test must be carried out of the entire system.

The sensors have to be subjected to the test gas, and if necessary recalibrated. However, the calibration on site will be carried out only after the required warm-up time of the sensor. This is normally one week.

About the setting values and the result of the commissioning will be drawn up a protocol. The operator receives a copy of it.

Maintenance

The devices must be subjected in regular inspections by trained personnel. The maintenance interval depends on the connected sensors and is shown in the service label.

Test gas is applied to the sensors. The concentration to be used should trigger the main alarm to the devices. If necessary, recalibrate the sensor or the signal conditioning.

Corresponding checks are to ensure that the environment of the devices is always clean, accessible and visible.

About the setting values and the result of maintenance shall be taken a protocol. The operator has to provide with a copy.

The responsibility of the maintenance for the proper execution, the condition of the equipment and the information in the protocols is bearing the implementing company.

Warranty

As a manufacturer, we assume a warranty for the devices from date of purchase of 2 years.

This is valid in all countries where the devices are sold by authorized dealers.

Within this warranty period we will rectify by repair or replacement of appliances all defects that are based on material or manufacturing defects.

The warranty does not cover: damage due to improper use, normal wear and tear defects that affect the value or usability of the device only insignificantly.

In particular sensors with heated sensors (all semiconductors, pellistors, and zirconium oxide) may be formed by the evaporation of substances existing in the ambient air, solid material residues on the sensor pills, which may alter the sensitivity greatly or significantly reduce, thereby the durability may drop significantly.

Should the sensor by on-site existing foreign substances, such as coffee powder, oil vapors, refrigerant-oil mixture, halogens, floor coatings, etc. completely and / or partially destroyed and therefore must be replaced with a new sensor (moreover, it could not be called any pollutants in advance) so this do not represents a warranty case.

The oxygen sensor must be returned at allegedly technical defects to the main plant to Denkendorf for local technical examination. Only when the local investigation establishes beyond reasonable doubt, that it is a material or a manufacturing fault, this sensor – in the context of guarantee residual maturity - will be changed free of charge. All possibly further beyond that costs such as postage costs, travel costs, exchange and cost of technicians etc. will not be additional the expense of UMSITEC.

But if, for example, the investigation in our main plant in Denkendorf shows that the defect was caused by an on-site damage (accidentally or intentionally), misapplication, or incorrect operation, the incurred investigation costs will be charged to the account of the respective user / operator / maintenance company.

Interventions by unauthorized locations or when using other than original spare parts, the warranty will be voided immediately.

Status: 15.10.2015

Reserve technical changes