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Product datasheet

Mobile Gas Alarm - Gas Detection Signaling Column KSDG-4

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Application

The mobile detection and signaling column is intended to be adapted wherever there is a need for periodic detection of many hazardous gases, but due to the specificity of the object or its temporary nature, it is not possible (or unprofitable) to use stationary gas detection systems. The column is a cover for detectors that may be exposed to unfavorable environmental conditions that may lead to their flooding with water, or contamination with dust, varnish, mud, or other substances that deteriorate the working and servicing conditions of the detectors. Significant deterioration of the above-mentioned working conditions of the detector without the use of a cover is usually the main cause of its reduced durability or damage. In addition to the detectors, the column has one optical-acoustic signaling device permanently installed to inform about exceeding the concentration of hazardous gases, as well as two sockets for connecting additional, portable signaling devices. As a standard, the signaling devices, both additional and integrated with the column, generate an optical (flash) red signal after exceeding the concentration of the first alarm threshold, and additionally, an acoustic signal (intermittent) after exceeding the concentration of the second alarm threshold of detected gases. Optionally, the signaling devices can be equipped with an additional green lamp, which lights up during the standby mode, if the concentration of the first threshold of any of the detected gases has not been exceeded. In this variant, when the first alarm threshold of any of the detected gases is exceeded, the green lamp goes out.
A typical application of the column is to create the possibility of protecting areas where people work together with machines emitting toxic gases or vapors. Such places are; construction of closed facilities, in which there is no ventilation yet (e.g. tunnels, underground passages, underground warehouses, shelters, large halls ...), warehouse or industrial halls, where the specificity of storage or use makes it impossible to use stationary detection systems, as well as supplementation of stationary systems for the detection of hazardous gases. The column is designed for installation of multi-gas Pro-Service detectors; DUOmaster M or Tmaster M. One column is used for simultaneous monitoring of gas concentrations: O2, CO, CO2, NO2, LPG. Sample configurations - main module (upper) / lower module:
- O2 / CO2 detection
- CO / LPG detection
- O2 / NO2 detection
- CO / LPG / NO2 detection

On request, after agreeing with the Pro-Service company, it is possible to detect other gases or dangerous vapors, or to opt out of the detection of some of them.

Construction

The column and covers of additional signaling devices are made of steel, and their elements are welded. The whole thing is covered with a durable layer of powder varnish (yellow as standard - on request, any color from the RAL color palette).
The mobile detection system consists of;
a. Detection and signaling column.
b. Optional; two additional external signaling devices.
The length of the power cable to the column and the length of the cables to the external signaling devices should be specified in the order, because they are delivered complete and terminated with appropriate plugs for connection. The mobile detection system requires a 230V AC power supply with a PE wire connection. The housing also has an additional grounding terminal. It is recommended that the circuit from which the column will be powered is protected by a residual-current circuit breaker.

The method of setting and connection.

Column dimensions; height - 188cm, width - 22cm, depth - 22cm, leg spacing - approx. 90cm.
Dimensions of the additional signaling device cover; height - 40cm, width - 24cm, depth - 16cm.
The column should be placed on a flat, stable surface in place not subject to overturning, in the work area of people and the expected accumulation of hazardous gases. Additional signaling devices should be hung in clearly visible places, not exposed to their knocking down. Arrange the cables so that they are not exposed to mechanical damage and flooding with water.
The circuit powering the column should be protected with a B4A self-acting circuit breaker. After making the connections, perform measurements of the effectiveness of the electric zeroing or the effectiveness of the residual-current protection. The column is also equipped with a grounding clamp.

NOTE: The KSDG-4 mobile signaling column for gas detection cannot be used in designated zones with a gas or dust explosion hazard.

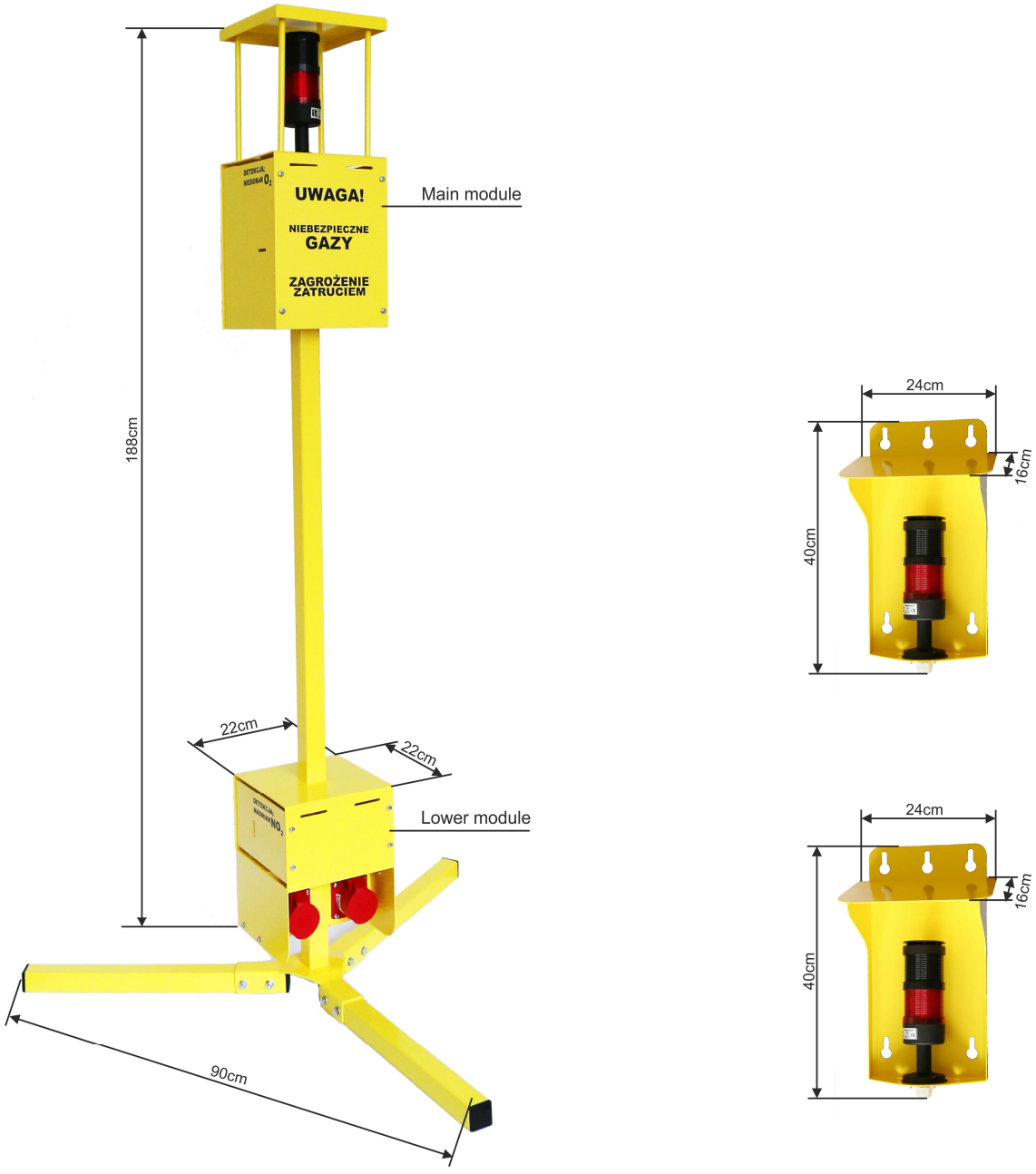

Fig. 1. View of the KSDG-4 column and additional external signaling devices.