



**MULTI-CHANNEL GAS WARNING SYSTEM**

# MWVS 903





## Application

The **multi-channel gas warning equipment MWS 903** continuously monitors the surrounding air and provides an early warning of dangerous, explosive and non-combustible gases and vapours.

## Fields of Application

### Monitoring of:

- Heating systems
- Garages
- Liquid gas storage rooms
- Laboratories
- Cold-storage houses
- Plastic processing plants
- Chemical industries
- Paint manufacturing plants
- Concentration measurement of O<sub>2</sub>
- and many more

## Features

- 6-section keyboard and illuminated 4-line LC-Display for indicating actual values, half-hourly average values and fault messages, all clear text encoded
- Ready, Fault and Gas warning display
- Menu-assisted settings for the equipment parameters, via 6-section keyboard
- Two alarm thresholds for each sensor, independently adjustable from 5 to 100% of the measurement range; facility for forming half-hourly average value
- A maximum of 12 floating alarm outputs for controlling extra warning and control devices
- Floating change-over contacts for fault, siren and warning banners
- Serial interface output, RS 232 for connecting a printer or PC
- 4 – 20 mA
- Plastic, wall-mounted housing
- High operational reliability
- Low current consumption
- Easy installation
- USP unit available

## Example of measurable gases

| Gas                  | Formula                              |
|----------------------|--------------------------------------|
| Acetylene            | C <sub>2</sub> H <sub>2</sub>        |
| Alcohol              | e.g. C <sub>2</sub> H <sub>6</sub> O |
| Ammonia              | NH <sub>3</sub>                      |
| Butane               | C <sub>4</sub> H <sub>10</sub>       |
| Carbon dioxide       | CO <sub>2</sub>                      |
| Carbon monoxide      | CO                                   |
| Carbon tetrachloride | CCl <sub>2</sub>                     |

|                       |                                  |
|-----------------------|----------------------------------|
| Chloroform            | CHCl <sub>3</sub>                |
| Ether                 | C <sub>4</sub> H <sub>10</sub> O |
| Helium                | He                               |
| Hydrogen              | H <sub>2</sub>                   |
| Hydrogen chloride     | HCl                              |
| Methane (natural gas) | CH <sub>4</sub>                  |
| Neon                  | Ne                               |
| Oxygen                | O <sub>2</sub>                   |
| Petroleum spirit      |                                  |
| Propane               | C <sub>3</sub> H <sub>8</sub>    |
| Toluene               | C <sub>7</sub> H <sub>8</sub>    |
| Xylene                | C <sub>8</sub> H <sub>10</sub>   |

## Accessories

Signal horn (siren), Warning light, Warning banner, Test meters, Plotter, Stand-by power supply UPS 2000-24 V. Additional accessories will be offered, according to the system required. An early warning of dangerous, explosive and non-combustible gases and vapours.

## Technical Data

|                          |   |
|--------------------------|---|
| Sensor inputs:           | 8, two-or-three-wire sensors (e.g. LCTR 903) with current interface, 4 – 20 mA  |
| Sensor supply:           | 24 V = / 200 mA   |
| Ranges:                  | CO 0–300 ppm<br>NO <sub>2</sub> 0–30 ppm<br>CH <sub>4</sub> 0–100 % LEL<br>CO <sub>2</sub> 0–10 Vol %<br>other ranges on request                    |
| Ambient temperature:     | -10 °C to +40 °C  |
| Digital inputs:          | 1 input for siren cancel  |
| Digital outputs:         | max. 12 Alarms<br>1 Fault relay<br>1 Siren relay<br>1 Warning banner relay<br>All outputs have floating change-over contacts, max. rating 250 V/4 A |
| Standard output signals: | Analog output 4 – 20 mA<br>serial interface RS 232  |
| Mains connection:        | 230 V / 50 Hz<br>115 V / 60Hz (optional)<br>24 V=   |
| Dimensions (WxHxD):      | 240 x 160 x 90 mm   |
| Weight:                  | approx. 2 kg  |
| Protection:              | IP 54, to DIN 40050   |