

# MP-series

## Gas detectors



### - Gas detectors for flammable, toxic and refrigeration gases

#### General:

The MP-series is a range of gas detectors must be used with monitoring units G27C, SPU, MPU2C, MPU4C or MPU6C.

Available models:

- Room mounting (IP21, IP54, IP67)
- Vent line from pressure relief valves
- Duct mounting

#### Measuring ranges and alarm levels:

Alarm levels are always set at the monitoring unit. Measuring ranges and alarm levels depend on mounting environment and detection application.

#### Standards and regulations:

Requirements for gas monitoring in refrigeration plants is regulated by European standard (EN378: 2008). It is required that all plants with a charge of >50kg ammonia and >25kg for all other refrigerants, must have gas detection systems installed in machinery rooms and other areas where there is a risk of reaching the practical limits or to the safety of personnel.

According to EN378 it is also required that all installed detection systems are tested at least once per year and the results are documented in the system logbook.

Use of HFCs and other fluorinated greenhouse gases is regulated by the European F Gas Directive (EC No. 842/2006) as well as country specific legislation. Check local standards and regulations for hygienic and environmental limit values etc.

Be sure wiring is done according to local electrical code requirements.

#### KEY FEATURES

- **Gas detectors for toxic, flammable and refrigeration gases (non ATEX)**
- **Refrigerants as HFC / HCFC, Carbon Dioxide (CO<sub>2</sub>) and Ammonia**
- **Hydrocarbons like car fuel (hexane), ethanol, Hydrogen, natural gas (methane), propane (LPG) and butane etc**
- **Room mounting IP21, IP54, IP67**
- **Duct mounting**
- **Vent line from pressure relief valves in refrigeration plants**

#### Technical Data:

##### MP-D

Material:	PC
Ambient temp:	-30..+50°C.
Humidity:	10-90 % Rh (non condensing)
Weight:	0,15 kg
Dimensions:	80 x 82 x 56 mm

##### MP-DS

Material:	PC
Ambient temp:	-40..+50°C.
Humidity:	10-90 % Rh (non condensing)
Weight:	0,19 kg
Dimensions:	130 x 82 x 56 mm

##### MP-DK


Material:	PC
Ambient temp:	0..+50°C.
Humidity:	10-90 % Rh (non condensing)
Weight:	0,08 kg
Dimensions:	380 x Ø 25 mm


##### MP-DR


Material:	HFC, HCFC brass 1/2"-flare NH <sub>3</sub> , steel R1/2"
Ambient temp:	0..+50°C.
Humidity:	10-90 % Rh (non condensing)
Weight:	0,14 kg
Dimensions:	70x25 mm


#### Common data:

Cable length to monitoring unit:	3 x 0,75 mm <sup>2</sup> up to 50m 3 x 1,5 mm <sup>2</sup> up to 100m
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Order code	Model	Description		
	<b>MP-D</b>	Room mounting IP21 Dimensions 80 x 82 x 56mm		
38-210	MP-D-CO2	0-10000 ppm, NDIR sensor. 0..+50°C.		
38-220	MP-D-HFC	0-4000 ppm		
38-230	MP-D-CH	0-40% LEL		
38-250	MP-D-NH3-1000	0-1000 ppm		
38-252	MP-D-NH3-4000	0-4000 ppm		
38-280	MP-D-Methane	0-40% LEL		
38-290	MP-D-Propane	0-40% LEL		

	<b>MP-DS</b>	Splash proof, room mounting IP54/IP67 Dimensions 130 x 82 x 56mm		
38-410	MP-DS-CO2	0-10000 ppm. NDIR sensor. 0..+50°C. IP67		
38-410-H	MP-DSLTCO2	0-10000 ppm. NDIR sensor. -40°C..+50°C. IP67		
38-420	MP-DS-HFC	0-4000 ppm		
38-430	MP-DS-CH	0-40% LEL		
38-450	MP-DS-NH3-1000	0-1000 ppm		
38-452	MP-DS-NH3-4000	0-4000 ppm		
38-470	MP-DS-H2	0-40% LEL		
38-480	MP-DS-Methane	0-40% LEL		
38-490	MP-DS-Propane	0-40% LEL		

	<b>MP-DK</b>	Detector for duct mounting with 1,5m cable Dimensions 380 x Ø 25mm		
38-820	MP-DK-HFC	0-4000 ppm		
38-850	MP-DK-NH3-1000	0-1000 ppm		
38-852	MP-DK-NH3-4000	0-4000 ppm		

	<b>MP-DR</b>	Detector specially designed for vent lines from pressure relief valves in refrigeration plants. Dimensions 75 x 25mm		
38-620	MP-DR-HFC	0-4000 ppm		
38-652	MP-DR-NH3-4000	0-4000 ppm		

**Alarm levels, factory standard presets (always selected/set at the monitoring unit):**

CO <sub>2</sub> :	2000/2000/5000 ppm
HFC:	100/1000/2000 ppm
Hydrocarbons CH:	5/10/20% LEL
NH <sub>3</sub> -1000:	150/300/500 ppm
NH <sub>3</sub> -4000:	150/500/3000 ppm
Hydrogen H <sub>2</sub> :	5/10/20% LEL
Methane:	5/10/20% LEL
Propane:	5/10/20% LEL