

Emission monitor for SF₆ gas Model GA35

SF₆-IR-Monitor

Applications

Monitoring the concentration of SF₆ gas in the ambient air for guaranteeing occupational safety in enclosed spaces

Special features

- Responds only to SF₆ gas and is not sensitive to humidity and the usual volatile organic compounds (VOC)
- Fast response time
- Continuous measurement
- Easy integration into distributed control system thanks to 4 ... 20 mA output
- Settings protected by password

Description

Continuous monitoring

The emission monitor model GA35 has been specially designed for detecting the SF₆ gas concentration in enclosed rooms.

If SF₆ gas is processed or stored, harmful quantities of SF₆ gas can escape due to improper operation or leakage. The model GA35 makes it possible to monitor spaces of up to 250 m².

SF₆ gas is five times heavier than air, therefore breathing air can be displaced in case of higher concentrations of SF₆ gas, leading to a risk of suffocation in enclosed spaces.

The GA35 continually controls the room air by means of a non-dispersive infrared sensor. Usually, samples are continuously taken close to gas tanks or gas-insulated switchgear, from which large quantities of SF₆ gas can escape within a short period of time.



Emission monitor model GA35 with sampling box

Reliable warning

Via a high-volume alarm, there is an immediate warning of any hazardous gas concentrations in the air. Since SF₆ gas sinks due to its high molecular weight compared to the room air, it is useful to mount the sampling box near to the ground.

Particle filters in the sampling box and in the hose connection ensure that the measuring result is not falsified by impurities. To ensure reliable operation, the flow control of the GA35 emits an error alarm in the event of a pump failure or a clogged supply line.

Specifications

Measuring principle

Two wavelengths, non-dispersive infrared sensor

Measuring range

0 ... 2,000 ppm_v

Monitoring area

≤ 250 m²

Resolution

5 ppm_v

Accuracy

≤ 100 ppm_v ±5 ppm_v

> 100 ppm_v ±2 %

Permissible inlet pressure

800 ... 1,150 mbar abs.

Warm-up time

Readiness for operation after 1 minute

Meets the specifications after 40 minutes

Response time

< 30 s

Display elements

1 LC display

2 alarm LED

1 error LED

Controls

3 navigation keys

4 calibration keys

Power supply

AC 90 ... 260 V, 50/60 Hz, 13 W

Active current loop

Output signal: 4 ... 20 mA

Max. signal: 25.5 mA

Min. signal: 3 mA

Error signal: 0 mA

U_{max} at 20 mA: ≤ 11 V

Load: 430 Ω

Relay outputs

3 SPDT (change-over contacts)

(2 alarm, 1 fault)

Switching capacity:

AC 260 V, 8 A

DC 30 V, 8 A

Audible alarm

Buzzer will sound if the value exceeds or drops below the set alarm values (direction of action settable, IDLE POLARITY)

Maximum hose length

30 m

Permissible ambient temperature

Storage: -10 ... +60 °C

Operation: 0 ... +45 °C

Permissible humidity

0 ... 95 % r. h.

Ingress protection

IP 54

Dimensions

W x H x D: 260 x 280 x 140 mm

Weight

2.5 kg

Calibration interval

Recommended every 2 years

CE conformity




EMC directive

2004/108/EC, EN 61326 emission (group 1, class B) and interference immunity (industrial application)

Low voltage directive

2006/95/EC, EN 61010-1

Accessories

	Description	Order no.
	Particle filter	14005137
	Sampling box	14015834
	Hose from PU (piece goods)	14007875