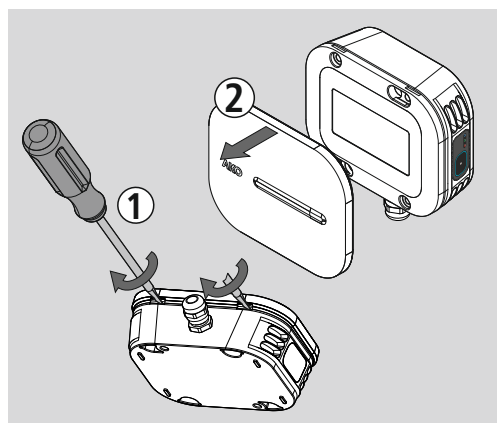CE Instructions

AKO-57624

General warnings

⚠️ -Using the unit without observing the manufacturer's instructions may alter the appliance's safety requirements.

- Detectors should be installed in a place protected from vibrations, water and corrosive gases, where the ambient temperature does not exceed the value indicated in the technical data.

- Detectors supervise a point and not an area. If the gas leak does not reach the sensor, or the level of concentration in that point does not reach the alarm values, no alarm will be activated. If perimeter supervision is required, several sensors should be installed around that area.

Working conditions:

-Keep the detector work environment free of chemical agents (such as solvent, paints, alcohol, acetone, silicone, etc.), and free of engine fumes or gases from fermentations (bread, pizza) or ripening (breathing) of fruits.

-The detector should generally be installed in an area of potential concentration/accumulation of gas, in low positions (due to the greater relative density, in relation to air, of the gases subject to detection).

-The **AKO-57624** refrigerant gas detector may only be used in locations that have not been classified with risk of explosion.

-Reference regulations: EN 378
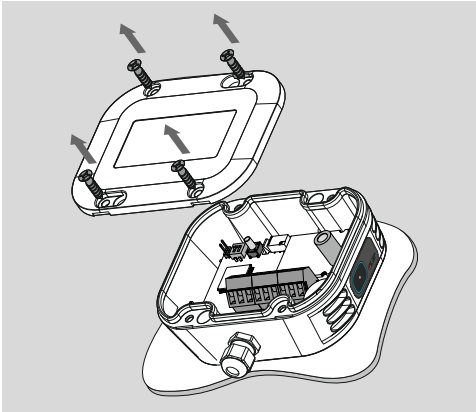
-Applicable local regulations: Compliance must be ensured

Installation

Option A
Fixed by screws

36 mm
70 mm

x2
Ø 2,8 mm

+ x2
Ø 5 mm
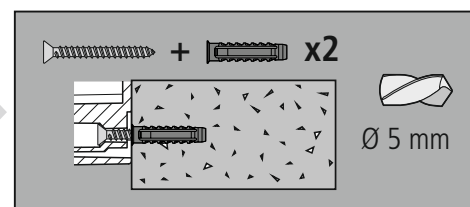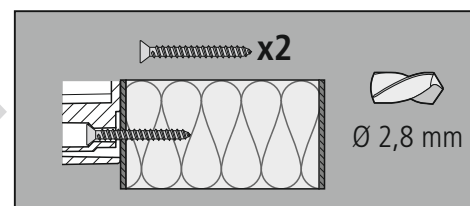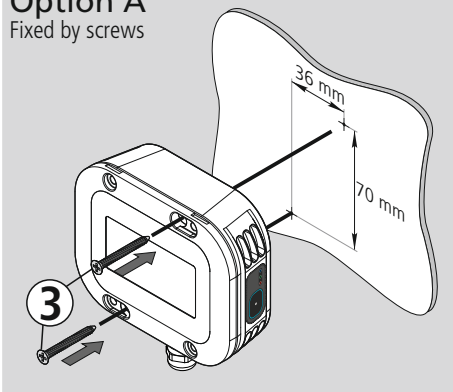
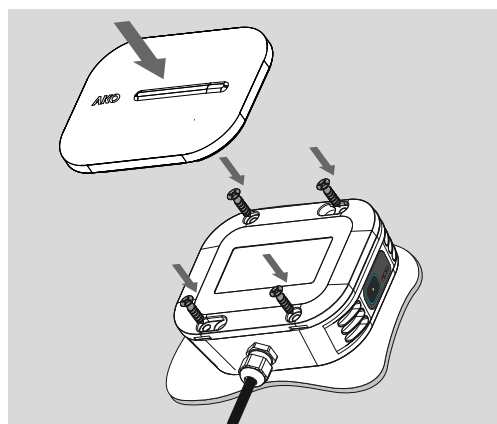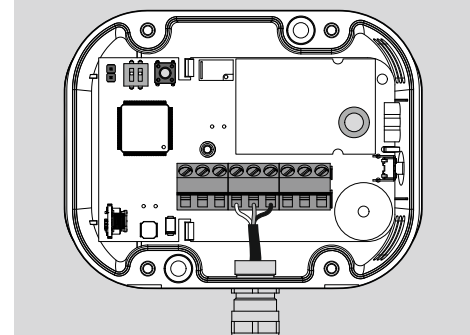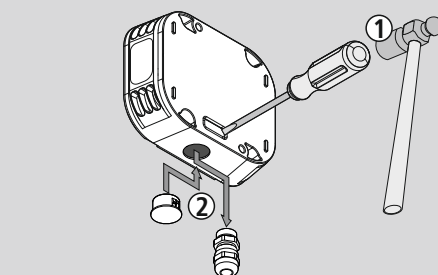## Option B
Fixed by an adhesive
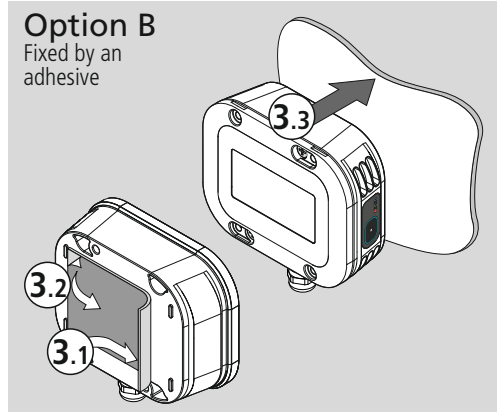
Connect following the diagrams

Optional rear cable entry

⚠️ Carefully perforate the rear entry so as not to damage the electronic board.
This option involves changing from IP68 to IP40.

Technical specifications

Power supply	12-30 Vdc
Consumption	Typical: 75 mA, Maximum: 150 mA
Alarm relay	SPDT 30 Vdc, 2A, cos φ =1
Working ambient temperature	-25 to 50 °C
Storage ambient temperature	-25 to 60 °C
Range of moisture permitted	0 - 95 % RH (Without condensation)
Protection degree	IP68
Dimensions	107 mm (W) x 85 mm (H) x 39 mm (D)

Complies with the EN 14624 standard.
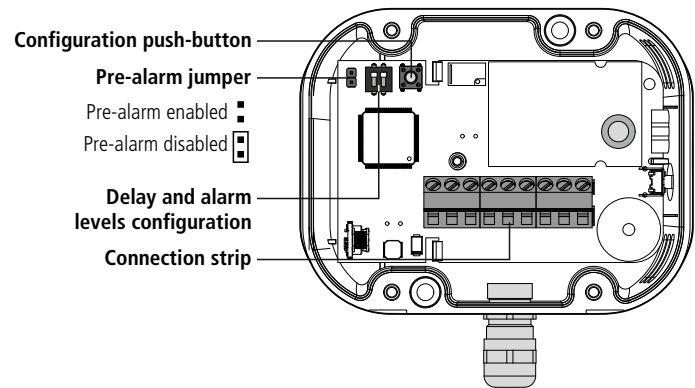
Description

Refrigerant gas detector, which can be used in independent operation or connected to alarm stations AKOCam, AKOAlarm and AKOGas.

Independent detector: The detector makes a certain warning sound in the event of an Alarm, Pre-Alarm or sensor error and the red indicator lights up (See operation section).

Detector connected to the alarm station: The detector notifies the station of its status (Alarm, Pre-Alarm or sensor error) and the station notifies the alarm through sound and indicators (for further information consult the station's manual).

Configuration push-button
Pre-alarm jumper
Pre-alarm enabled
Pre-alarm disabled
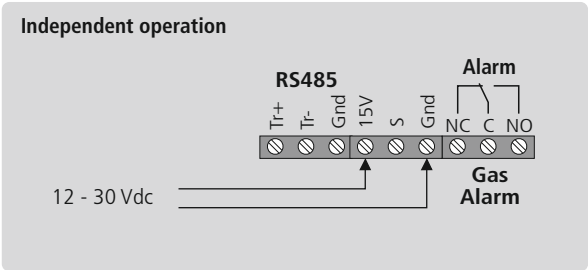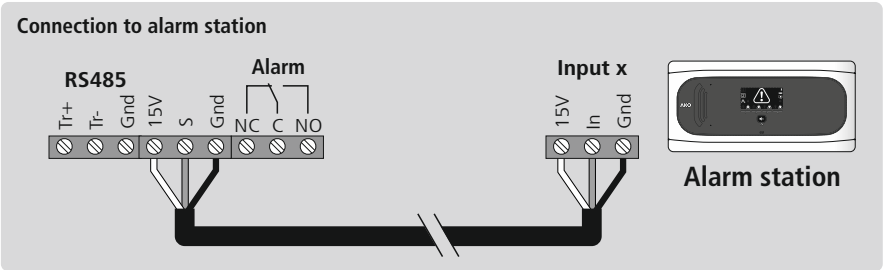Delay and alarm levels configuration
Connection strip

Always disconnect the power supply to do the wiring.
The wiring between the detector/transmitter and the station should **NEVER** be installed in a conduit together with power, control or supply cables.
Cables for wiring the relay contact should have an adequate section depending on the unit to be connected.
Certain international standards maintain that the power supply of the alarm should originate from a different circuit to that used by the refrigeration and ventilation system. **Please ensure that you comply with current local regulations.**

GASES DETECTED			
R-32, R-454A, R-454C, R-455A, R-1234YF			
DEFAULT LEVELS		SECOND SET OF LEVELS	
PRE-ALARM	ALARM	PRE-ALARM	ALARM
1000 ppm	1500 ppm	2000 ppm	4000 ppm

Second alarm set is recommended for **R-32** and **R-1234YF** refrigerants.

Alarm delay

Without delay | 180 s

Alarm levels

By default | 2nd set of levels

Wiring

Connection to alarm station

RS485 — Tr+ Tr- Gnd 15V S Gnd
Alarm — NC C NO

Input x — 15V In Gnd

Alarm station

Independent operation

RS485 — Tr+ Tr- Gnd 15V S Gnd
Alarm — NC C NO

12 - 30 Vdc

Gas Alarm

Operation

Mute push-button

In the event of an Alarm or Pre-Alarm in process, any push-button press silences the Alarm/Pre-Alarm tone.
Any push-button press deletes saved alarms.

Medium press (between 3 and 9 sec.): It activates or deactivates the SET-HOLD mode. Should there be a sensor error, reset the detector.

Long press (> 9 sec.): It activates or deactivates the MAINTENANCE mode. Should there be a sensor error, reset the detector.

Red: Alarms
Mute push-button
Green: Operation
Blue: Operating mode

Indicators

	Red	Green	Blue
OFF	No alarms	Detector turned off	1st set of levels activated
ON	Alarm / Pre-Alarm activated	Standard operation	2nd set of levels activated
Flashing*	Alarm / Pre-Alarm saved	Standard operation, acoustic alarm disabled	MAINTENANCE mode activated
Flash*	Detector error	Detector in initialisation process	SET HOLD mode activated

***Flashing:** 0.5 s ON / 0.5 s ON / **Flash:** 0.1 s ON / 0.8 s OFF

Audible alarm

Pre-Alarm	Alarm	Sensor error
Intermittent sound	Bi-tonal sound	3 tones every 2 minutes

Alarm relay

Pre-Alarm	Alarm	Sensor error
NC C NO	NC C NO	NC C NO

Configuration

In this mode the acoustic alarm can be activated / deactivated or the detector can be returned to factory settings.
To activate it:

1.- Disconnect the power supply, reconnect it and press the "CONFIGURATION" push-button 5 times within 2 minutes; the detector will emit a confirmation beep and the blue indicator will show the status of the acoustic alarm: **ON:** Acoustic alarm enabled / **Flashing:** Acoustic alarm disabled.
2.- Press the Mute push-button to enable / disable the acoustic alarm.
3.- Press the "CONFIGURATION" push-button for 5 seconds to save the changes and exit the configuration mode; the detector will make 5 short beeps.

> **i** Optionally, you can return the detector to its factory settings. To do so, press the "CONFIGURATION" push-button 5 times before step 3.
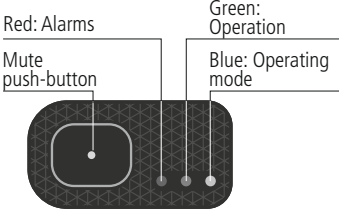
Pre-alarm jumper

Allows for Pre-alarm detection to be enabled / disabled. Before using this option, ensure that regulations allow for two alarm levels.

SET-HOLD mode

Prevents false alarms when charging or cleaning the chambers. While this mode is activated, pre-alarms will not signal and alarms will signal as pre-alarms when faced with all effects (sound, relay activation and signalling). This mode will remain active for a maximum of 5 hours, then will deactivate automatically.

Maintenance mode

Disables gas pre-alarms and alarms for 1 hour for maintenance tasks. While this mode is activated, no gas pre-alarm or alarm will sound.