

Gas Leak Detection Alarm

Quick guide



AKO-55624 AKO-55724

AKO ELECTROMECÁNICA, S.A.L.
Avda. Roquetes, 30-38
08812 • Sant Pere de Ribes.
Barcelona • Spain.

www.ako.com

Warnings



- The alarm and the transmitters / 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. The station should be installed in a monitored area, where it is guaranteed that people able to alert to the presence of alarms will be present.
- Neither the alarm nor the gas transmitter / detector are suitable for areas classified as potentially explosive.
- Transmitters / detectors measure gas concentration at a given point. If the gas leak does not reach the transmitter / detector, the alarm will not be activated.
- Transmitters / detectors cannot supervise areas. If perimeter supervision is required, several transmitters / detectors should be installed surrounding the area to be supervised.
- Thoroughly studying transmitters' / detectors' location is recommended, bearing in mind the areas most vulnerable to suffering leaks, the type of gas used, the size and shape of the room, air flows, maintenance work, etc.
- The **EN-378** and **F-GAS** international standards require that correct transmitter / detector functioning be checked at least once per year. Review what current local regulations specify for these cases. Consult the appropriate verification method in the transmitter / detector manual. **Be sure to always comply with current local regulations.**

Work conditions:

- Avoid handling refrigerant gases near the transmitter / detector. Do not paint the transmitter / detector or place it near solvents or paints. Exposure to acetone vapours may cause false alarms.
- The transmitter / detector should be installed away from:
 - Smoke outlets located in or originating from engines, generators or motorised machinery (fork-lift trucks, etc.).
 - Areas which are particularly damp or have strong ventilation.

Wiring



Always disconnect the power supply to carry out wiring.

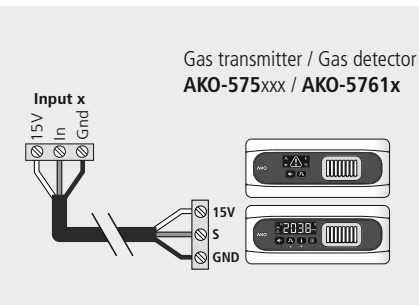
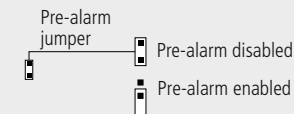
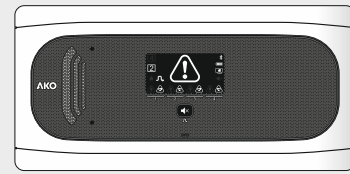
The wiring between the transmitter / detector / push-button and the station should **NEVER** be installed in a conduit alongside power, control or supply cables.

For disconnection, the power supply circuit must be equipped with a switch of at least 2 A, 230 V, located near the device. The power supply cable will be H05VV-F or NYM 1x16/3. The section to be used will depend on current local regulations, but should never be less than 1.5 mm².

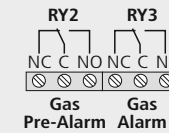
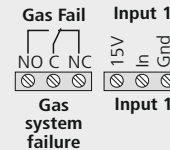
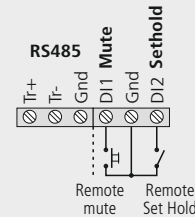
Cables for wiring the relay contact should have the relevant section for the device to be connected

The 120 / 230 V~ wiring area must be kept clear of any other external element.

Certain international standards indicate that alarm power supply should originate from a different circuit to that used for the refrigeration and ventilation system. **Be sure to comply with current local regulations.**

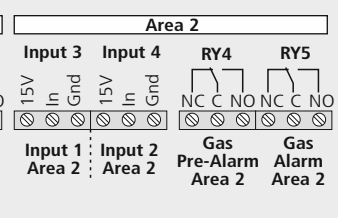
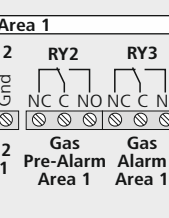
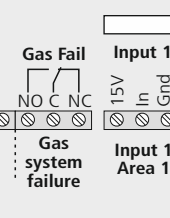
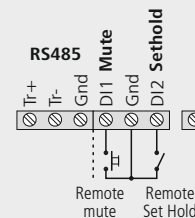


AKO-55624



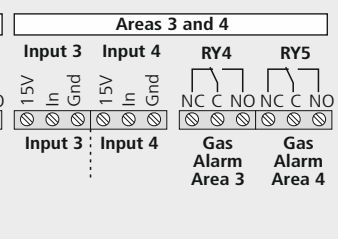
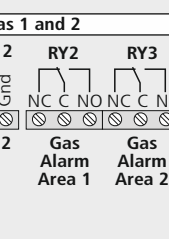
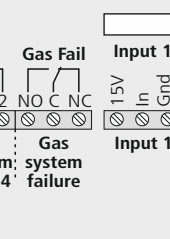
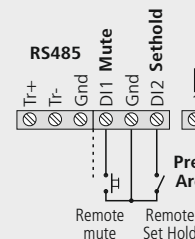
AKO-55724

2 AREAS



AKO-55724

4 AREAS



Configuration

Input auto-detection (AKO-55724 only)

Step 1:
Connect the station power supply. Input indicators illuminate sequentially.

Step 2:
Select the 2 or 4 chamber operation mode using the Mute push-button.

Step 3:
Press the "AUTOCONFIG" push-button for 5 seconds. The alarm will emit 5 short beeps. Configuration is complete.

 For correct input detection, **all devices must be correctly connected and in NO ALARM mode**, including devices connected via digital inputs.

 Once the alarm has been configured, this function will not be activated again. To activate it again, disconnect the power supply, connect it again and press the "AUTOCONFIG" pushbutton 5 times consecutively within 2 minutes and repeat step 2 within another 2 minutes.

Once configured, the display shows in green the indicator corresponding to the device detected at each input:

 Gas detector / transmitter

Pre-alarm jumper  Pre-alarm enabled
Activates / deactivates pre-alarm detection. Before using this option, ensure that regulations allow for two zzzalarm levels.  Pre-alarm disabled

 **When using the ammoniac or CO₂ detector, the pre-alarm must be enabled.**

Operation

No alarms
The input indicators are green.

Pre-alarm / alarm activated
The station emits an audible alarm sound, shows the affected input(s) in red, the general alarm indicator illuminates and the visual alarm flashes.

Gas pre-alarm / alarm saved
An alarm has sounded in the past. The affected input indicator flashes green.

Wiring error / malfunction
The station emits 3 short beeps every two minutes and the affected input indicator flashes red.

Short-circuit in an input
The affected input indicator flashes red and the input is disabled. The general alarm indicator also flashes. Once the problem has been resolved, to re-establish functioning of the affected input, press the Mute button for more than 1 second.

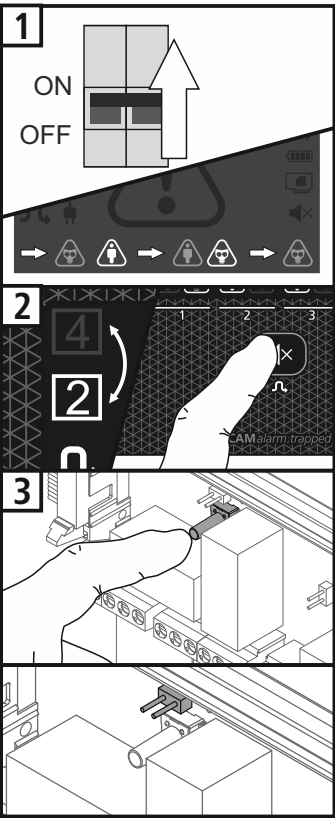
Alarm tones:

- Gas alarm: Bi-tonal sound.
- Gas pre-alarm: Intermittent sound.
- Wiring error / malfunction: 3 short beeps every 2 minutes.

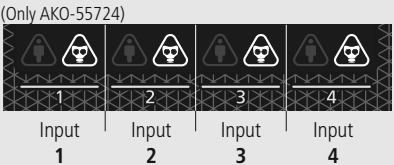
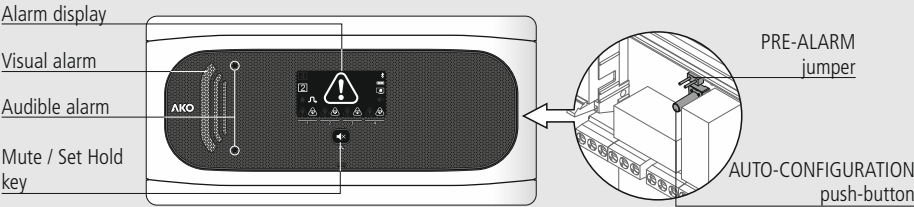
MUTE Function
Cancels alarm tone in the event of gas pre-alarm or alarm. To activate it, press the Mute key.
Does not affect relay or indicator functioning.
Indicator  is shown on the display
Trapped person alarms cannot be silenced.

Set Hold Mode
Avoid false alarms during the chamber charging or cleaning process. When this mode is activated, pre-alarms will not sound and alarms will sound like pre-alarms to all effects (sound, relay and signal activation). To activate / deactivate it, press the Mute key for 3 seconds; the display will show indicator . Unless it is manually deactivated, this mode will remain activated for a maximum of 5 hours, before automatically deactivating itself.

Maintenance Mode
Disable the gas pre-alarms and alarms for 1 hour for maintenance tasks. When it is activated, no gas pre-alarm or alarm will sound. To activate / deactivate it, press the Mute key for 6 seconds; indicator  will flash.



Description



Keypad

Pressing for 3 seconds activates / deactivates the Set Hold mode.
Pressing for 6 seconds activates / deactivates the maintenance mode.
Pressing briefly deletes saved alarms.
For gas pre-alarm / alarm, pressing briefly silences the alarm tone.

Indicators

-  **Constant green:** Gas transmitter / detector connected.
-  **Flashing green:** Gas pre-alarm / alarm saved
-  **Quick-flashing red:** Malfunction / wiring fault in gas transmitter / detector.
-  **Slow-flashing red:** Gas transmitter / detector not detected or disconnected.
-  **Constant red:** Gas pre-alarm / alarm activated.

 **Constant:** Gas pre-alarm / alarm activated.
Flashing: Malfunction / wiring fault in gas transmitter / detector.

 **Constant:** CAMM module in operation
Flashing: CAMM module malfunction

 **Constant:** Set Hold mode activated
Flashing: Maintenance mode activated

 2 or 4 chamber operation mode
(Only AKO-55724)

 Power supply present  Bluetooth activated (Only with CAMM module)  Gas alarm silenced

Relays
See accompanying table

STATUS	Relays		
	Gas Pre-alarm	Gas Alarm	System failure
With power supply No alarms			
No power supply			
Gas pre-alarm activated			
Gas alarm activated			
Wiring fault in gas detector			

Technical specifications

Power supply100-240 V~ 50/60 Hz
Maximum input power.....15 W
No. of inputs **AKO-55624**.....1
AKO-55724.....4
Compatibility of inputs:AKO-5761x gas detector
.....AKO-575xxx transmitter
Relays.....SPDT 8(2)A 250 V~
Working ambient temperature-5 °C to 50 °C
Storage ambient temperature-30 °C to 60 °C
Degree of protectionIP 65
Installation categoryII s/ EN 61010-1
Degree of pollutionII s/ EN 61010-1
Double isolation between power supply,
secondary circuit and relay output.
Sound power90 dB(A) at1 meter
MODBUS address.....Shown on label
Dimensions.....290 mm (W) x 141 mm (H) x 84.4 mm (D)

Maintenance

Clean the device surface with a soft cloth, water and soap.
Do not use abrasive detergents, petrol, alcohol or solvents, as this could damage the sensor.