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-576410 / 576032 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

Technical specifications

- Power supply...............................................................................................................................................................12-30 Vdc
- Consumption.....................................................................................................................................................................Typical: 75 mA, Maximum: 150 mA
- Alarm relay...........................................................................................................................................................................SPDT 30 Vdc, 2A, $\cos \phi = 1$
- Working ambient temperature.................................................................................................................................................-20 to 50 ºC
- Storage ambient temperature..................................................................................................................................................-20 to 60 ºC
- Range of moisture permitted..................................................................................................................................................0 - 95 % RH (Without condensation)
- Protection degree With cable entry using cable gland........................................................................................................IP68
- Protection degree With cable entry from the back................................................................................................................IP40
- Dimensions...........................................................................................................................................................................107 mm (W) x 85 mm (H) x 39 mm (D)
- Complies with the EN 14624 standard.

Installation

Option A

- Fixed by an adhesive
- Carefully perforate the rear entry so as not to damage the electronic board.

This option involves changing from IP68 to IP40.

Option B

- Fixed by screws
- 24 mm
- 70 mm

Connect following the diagrams

If the cable entry at the back has not been drilled, this option provides the IP68 rating.

With cable entry using cable gland

Carefully perforate the rear entry so as not to damage the electronic board.

This option involves changing from IP68 to IP40.
Description

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

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).

Wiring

Connection to alarm station

GASES DETECTED

<table>
<thead>
<tr>
<th>Gases detected</th>
<th>AOKO-576410</th>
<th>AOKO-576032</th>
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<tbody>
<tr>
<td>R-410A</td>
<td>500 ppm</td>
<td>1000 ppm</td>
</tr>
<tr>
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<td>1500 ppm</td>
<td>3000 ppm</td>
</tr>
</tbody>
</table>

Alarm delay

Alarm levels

Independent operation

Pre-alarm jumper

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.

*Factory configuration

Audible alarm

Alarm relay

Sensor error

Indicators

<table>
<thead>
<tr>
<th></th>
<th>Red</th>
<th>Green</th>
<th>Blue</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>No alarms</td>
<td>Detector turned off</td>
<td>A levels active</td>
</tr>
<tr>
<td>ON</td>
<td>Alarm / Pre-Alarm activated</td>
<td>Standard operation</td>
<td>B levels active</td>
</tr>
<tr>
<td>Flashing*</td>
<td>Alarm / Pre-Alarm saved</td>
<td>Standard operation, acoustic alarm disabled</td>
<td>MAINTENANCE mode activated</td>
</tr>
<tr>
<td>Flash*</td>
<td>Detector error</td>
<td>Detector in initialisation process</td>
<td>SET HOLD mode activated</td>
</tr>
</tbody>
</table>

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

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.

Connection strip

Connection to alarm station

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.

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