

# OPTICAL SMOKE DETECTOR

## AE002/OP

### Description

The AE002/OP Photoelectric smoke detector operates based on the light scattering effect (Tyndall principle) providing a fast alarm activation particularly in case of slow-burning (smouldering) fires occurs.

The main detector component is a dark chamber equipped with a light-emitting diode cell faced to a photodiode receptor set capables by a join operation to detect if any smoke particles have entry into the dark chamber.

Each detector has a LEDs located at the external assembly cover to inform to users by flashing about if the detector is in stand-by operation or in permanent alarm as well. Remote LED annunciator capability is available upon request as an optional accessory to be wired to the detector base terminals block.

This detector have a latching alarm feature. In case the detector in alarm function to move it to stand-by operation is requested to produce a detector power supply switch-off from the remote fire alarm panel.

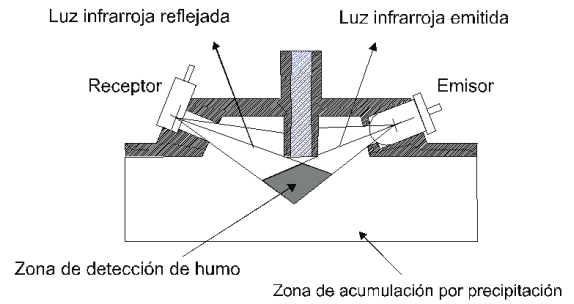
This detector model is manufactured and certified according to EN 54-7:2000 standard. In general all photoelectric detector types for smoke alarm applications are recommended to be installed within no dust polluted ambient rooms or inner zones.

By having a smoke detection area away from the walls of the chamber, disturbances that may be caused by the presence of dirt inside it are avoided.

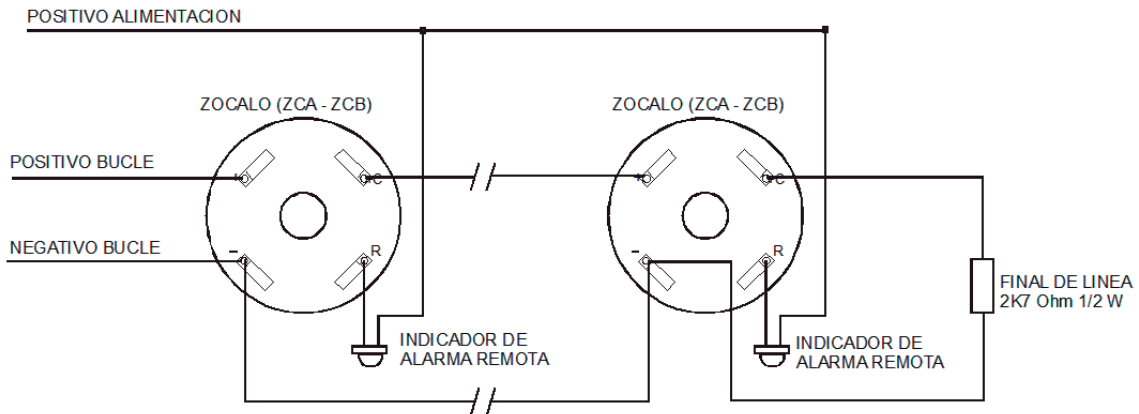
It is manufactured in two versions:

**With interlocking:** Once the detector goes into alarm due to the presence of smoke, it remains in alarm status. To restore it and return to the state of rest it is necessary to remove the power for a few seconds.

**With automatic reset:** The detector goes into alarm status in the presence of smoke particles, and when this smoke disappears it returns to the idle state.



### Wiring diagram



### TECHNICAL CHARACTERISTICS

DC:	PowerSupply 18 ~ 28 Vdc
Standby current:	180 µA
Alarm current:	22 mA max.
Loop Wires sizes:	2 X 1 mm <sup>2</sup>
Operating Temperature Range:	-10°C a +50° C ambient dry temperature.
Operating Humidity Range:	10% al 90% Relative Humidity, Non-condensing.
Lighting Annunciators:	Standby: Led flashing.
Alarm:	Continuous red lighting from LED
Remote alarm output, rate:	Remote LED annunciator.
Detector Dimensions: Cover :	105 mm. (Diameter)
Cover Height with base:	76 mm.
Raw Material:	White ABS plastic.

