

# **AUTONOMOUS OPTICAL SMOKE DETECTOR**

## AE/OP-230T

## Description

Optical type smoke detector that operates on the principle of scattered light (Tyndall effect). It allows detecting fires in their first smoke phase, before flames form or dangerous increases in temperature occur.

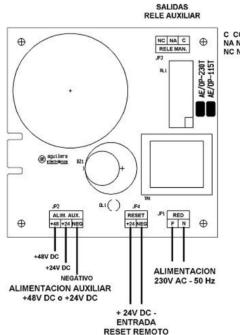


#### **Functioning**

Inside the darkroom there is an infrared light emitting diode and a receiver that work on the same band. Under normal conditions, the emitting diode emits light pulses every 8 seconds, which do not reach the receiver because it is located outside the path of the sent beam. With the presence of smoke in the chamber, the light pulses are scattered by reflection reaching the receiver. Once it has received the first pulse, the transmitter is fed back, emitting the pulses every 3 seconds, making it necessary for the receiver to receive up to three consecutive pulses for the detector to go into the alarm state.

Once the alarm status has been reached, the red led and the acoustic indicator are activated and the relay toggles to carry out the orders assigned to it. It is equipped with automatic reset, when the smoke present in the detector's optical chamber disappears, it automatically returns to the rest state. It also has a RESET input that allows the detector to be reset even with the presence of smoke in the environment.

### Connection diagram



C COMUN NA NORMALMENTE ABIERTO NC NORMALMENTE CERRADO

TECHNICAL CHARACTERISTICS		
Power supply voltage:	230 V AC-50Hz / 24V DC / 48 V DC.	
Consumption in standby:	0.60mA @ 24V, 0.70A @ 48V	
Consumption in alarm:	58mA @ 24V, 77mA @ 48V	
RESET input:	24 Vdc. / 48 Vdc.	
Alarm output:	C, NO and NC contacts free of voltage.	
Acoustic warning:	85 dB @ 1m.	
Led:	Standby: green flash 48 sec.	
	Pre-alarm: red flash every 3 seconds.	
	Alarm: solid red.	
Temperature range:	0° - 60° C.	
Humidity range:	10% - 90% relative humidity No condensation.	
Dimensions:	Ø 165 mm. Height: 45mm	
Housing material:	white ABS.	1