MAINTENANCE

The minimum maintenance recommended by detector consists of an annual cleaning of dust from the head of the detector, by making use of an air compressor, and cleaning all the air inlets. For more thorough cleaning, send the detector to the manufacturer.

Do not dismantle the detector. Opening the detector signifies loss of the guarantee.

DETECTOR CODING

All algorithmic detectors must be coded with a number as corresponds to their personalization. The recording of the detector numbering can be carried out from:

1. AE/SA-PRG manual address programmer. See the programmer's manual for their coding.
2. Algorithmic Panel. See operations manual of the algorithmic panel for their coding.

The identification number of the unit, as well as the operation pilot, is stored in EEPROM memory.

Before connecting the module to the algorithmic loop, **verify the coding is correct**.

INHIBITION OF FLASHING OF THE OPERATION PILOT

The operation pilot mode can be altered by the AE/SA-PRG programmer or through the coding mode of the Algorithmic Panel. By default, the operating mode is activated.

From the Algorithmic Panel, the flashing of the operation pilot can be disconnected generally.

TECHNICAL CHARACTERISTICS

Power supply voltage:	18 ~27 V (AE/SA-CTL Algorithmic loop card).
Consumption when idle:	1.1 mA
Consumption in alarm state:	4 mA
Temperature range:	-10º - +50º C (ambient temperature)
Humidity range:	Relative humidity 10% - 90% without condensation.
Casing material:	ABS
Luminous indicator:	Operation pilot: green flash (can be inhibited). Alarm: red permanent
Size:	diam. 106 mm. Height: 53 mm with low base.
Remote alarm output:	80 mA max.
Compatible bases:	AE/SA-Z low base: AE/SA-ZA high base:

CERTIFICATIONS

CE

0099

Aguilera Electrónica S.L.
C/Julián Camarillo 26 - 28037 MADRID - E
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0099/CPD/A74/0014

UNE-EN 54-5: 2001 (EN 54-5:2000)
UNE-EN 54-5/A1:2002 (EN 54-5:2000/A1:20
Detector de calor. Respuesta térmica Clas

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GRUPO aguilera

aguilera electrónica

ALGORITHMIC HEAT DETECTOR
MOD.: AE/SA-T

Heat detector with microprocessor that can be programmed from the fire panel to monitor temperature parameters on two levels: Differential and thermal.

Fabricated and certified according to the standard EN 54-5:2017 + A1:2018. **Class A1** thermal response.

The thermal detectors are specially designed for those places in which fire begins with sharp rises in temperature or where smoke detectors are not recommended due to the presence of combustion gases in the atmosphere.

OPERATION

It monitors two alarm levels:

1. Differential: It goes to the alarm state when a sharp rise in temperature surpasses the programmed parameters in a certain period of time.
2. Thermal: It goes to the alarm state when a slow rise in temperature that has not been detected by the differential system, reaches a preset temperature.

It includes:

- Operation pilot: It indicates it is operating correctly, giving green-colored flashes through the alarm LED. If the flashes are a nuisance in specific cases, they can be inhibited on an individual basis from the detector itself, or in general from the Algorithmic Fire Control Panel.
- Alarm level: This level is programmed from the algorithmic fire panel, individually, by sectors, or collectively for each type. They always take a default value to assure their correct operation.
- Remote alarm output: They have a remote alarm output for connection of action indicators, etc, which is activated when the detector reaches the programmed alarm level.
- Individual identification: Each detector is identified individually with a number inside the installation loop. This number is stored in EEPROM memory whereby it is kept even though the detector is without power for a long period.

Ae-man-821-0.0 v1.2 TECHNICAL MANUAL

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WIRING SCHEMATIC

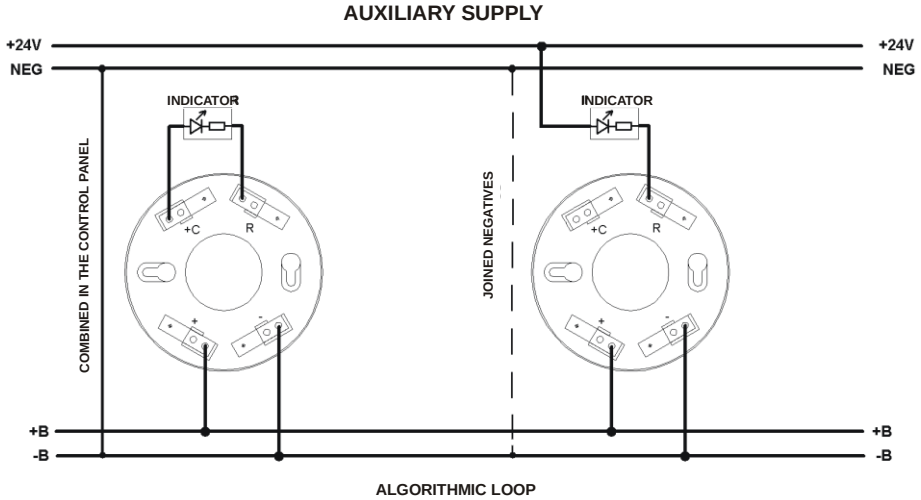
Assembly

The base of the detector can be mounted directly on false ceiling surfaces, or on electric connection boxes shaped octagonally (75mm, 90mm or 100mm), round (75mm) or square (100mm), with no need for a mechanical adapter.

Wiring

Disconnect the supply voltage of the detection loop before installing the detector base.

- Connect the positive input of the detection loop to the + terminal.
- Connect the negative input of the detection loop to the - terminal.
- If a remote action indicator is to be installed, connect the positive of the indicator to the +C terminal or positive of auxiliary supply and the negative to the R terminal.

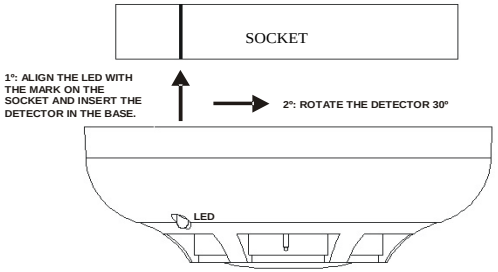


The action indicator can be fed from the detector itself, taking into account the total consumption of the loop, or by means of an auxiliary supply.

If an auxiliary supply is used, the negative of the auxiliary supply should be joined to the negative of the algorithmic loop.

INSTALLING THE DETECTOR

- Position the detector on the base of the detector, aligning the marks as indicated in the figure.
- Rotate the detector gently clockwise until it is well coupled.
- After installing all the detectors, reconnect loop supply voltage.



PRECAUTIONS

- It is recommended to remove the detector from the base if construction activities (painting, sanding,...) are to be carried out, which can produce dust in suspension.
- The detector should not be painted. The painting can block the inlets and alter its operation and sensitivity.

VERIFICATION OF OPERATION

The detectors must be tested after installation and undergo periodic maintenance.

Before carrying out the operating tests, notify to the competent authority that maintenance tasks are being carried out in the fire detection system, and make sure that all the evacuation, operation and tripping functions for automatic extinguishing are disabled.

- When removing the detector from the base, the area should be put in the fault state. If it does not do so, check the detector base wiring.
- Check that the detector is working, by observing that it emits green colored flashes every 10 s, provided this function has not been inhibited individually from the detector itself, or generally from the Algorithmic Fire Detection Panel. If the flashing is not inhibited and the detector does not emit them, this means it has failed or the wiring is faulty.
- Heat test. Apply a hot air blast at a temperature of between 65 °C and 80 °C at a distance of a few centimetres. The detector should indicate the alarm state by activating the red colored LED in a permanent mode in a time period of no more than 30 s.
- If we have connected a remote action indicator, it will also light up. If this does not take place, check the wiring and the position of the detector on the base, and that the marks on the base and on the detector coincide.
- The detectors that have not passed the operating tests should be replaced and repaired.

The detectors that have not passed the operating tests should be replaced and repaired.

When the tests have been completed, reconnect the evacuation, operation and extinguishing functions again, and notify the competent authority that the fire detection system is again in service.

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