

- Disconnect a detector from the detector loop and check that the zone passes to a fault state.
- Reconnect the detector. Check that the zone passes automatically to the idle state.

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

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

MAINTENANCE

The minimum maintenance recommended for a module consists of a visual inspection, as well as a periodic operating test.

For the operating test, follow the previously indicated procedure. (See the operating manual of the corresponding algorithmic panel).

MODULE CODING

All algorithmic equipment must be coded with a number as corresponds to its personalization. The recording of the module 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 operating manual of the algorithmic panel for their coding.

Program a number between **1** and **125** as corresponds for their personalization. For the algorithmic system, the module occupies a single position inside the loop, although the text and operation of the detector loop and of the supervised output can be personalized independently.

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 modified when carrying out the module programming process.

TECHNICAL CHARACTERISTICS

Power supply voltage:	18 ~27 V (AE/SA-CTL Algorithmic loop card).
Consumption when idle:	1 mA (auxiliary feed 17 mA)
Consumption in alarm state:	Modules AE/SA-M and AE/SA-MC5: 1.3 mA (auxiliary feed 44 mA) Module AE/SA-MDL: 1.3 mA (auxiliary feed 90 mA)
Algorithmic loop wiring	2-wire. Recommended cross-section 1.5 mm ² Removable jacks for all connections
Supervised output:	+24 Vdc
Relay characteristics:	Maximum resistive load = 1 A / 30 Vdc - 0.5 A / 125 Vac Maximum switching voltage = 125 Vdc - 125 Vac Maximum switching power = 30 W - 125 VA
Temperature range:	0° - +50° C (ambient temperature)
Humidity range:	Relative humidity 10% - 90% without condensation.
Casing material:	ABS
Luminous indicator:	Operation pilot: red flash (can be inhibited). Activation: red intermittent
Size:	105 x 82 x 25 mm
Fastening:	4 holes, diam. 3.5 mm
Weight:	100g.

ALGORITHMIC MASTER MODULES

MASTER MODULES AE/SA-M SERIES C5 DETECTOR MODULE: AE/SA-MC5 BEAM SMOKE DETECTOR MODULE: AE/SA-MDL

Units with microprocessor designed to be used with the algorithmic fire alarm panels of AGUILERA ELECTRONICA.

They include:

- A conventional detection loop that can be, according to the model:
 - AE/SA-M Conventional detectors or manual call points loop.
 - AE/SA-MC5: Conventional detectors loop of C5 SERIES of Aguilera.
 - AE/SA-MDL: Single Beam smoke detector loop.
- One supervised 24Vdc relay output, with end of line resistance.

These modules require an auxiliary power supply for operation.

The detection loop and the output are individually personalized in the Algorithmic Panel with the name of the location and the operation performed. Its operation is independent.



They include:

- Operation pilot: It indicates it is operating correctly, giving red-colored flashes through the status LED. The flashing frequency depends on whether the equipment in idle or not. If the flashing were annoying in particular cases, it can be inhibited individually.
- Removable jacks, to facilitate connection in the field.
- The circuit's protective case leaves the status LED of the unit visible.
- Individual identification: Each module is identified individually with a single number inside the installation loop. This number is stored in EEPROM memory whereby it is kept even though the module is without power for a long period.

WIRING SCHEMATIC

Assembly

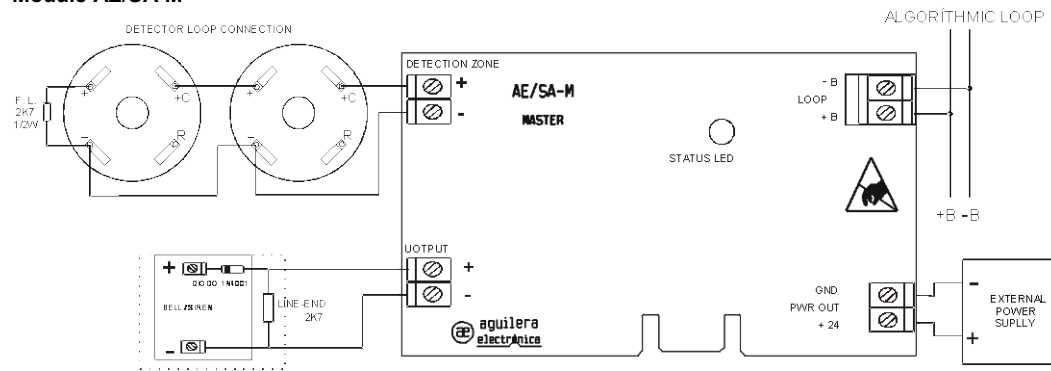
For the installation of the modules, open the module cover by pressing on its central part. Secure the module with 4 screws using the fastening holes foreseen for this purpose.

Wiring

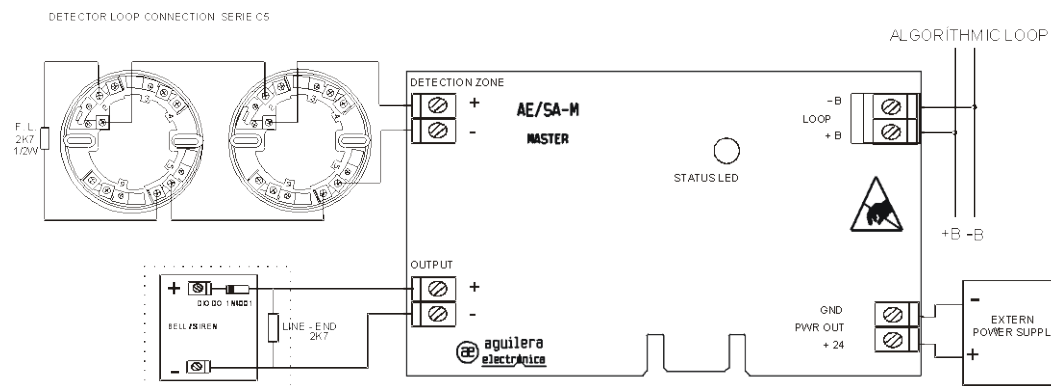
Disconnect the supply voltage of the detection loop before installing the module.

- Connect the positive input of the detection loop to the + B terminal.
- Connect the negative input of the detection loop to the - B terminal.

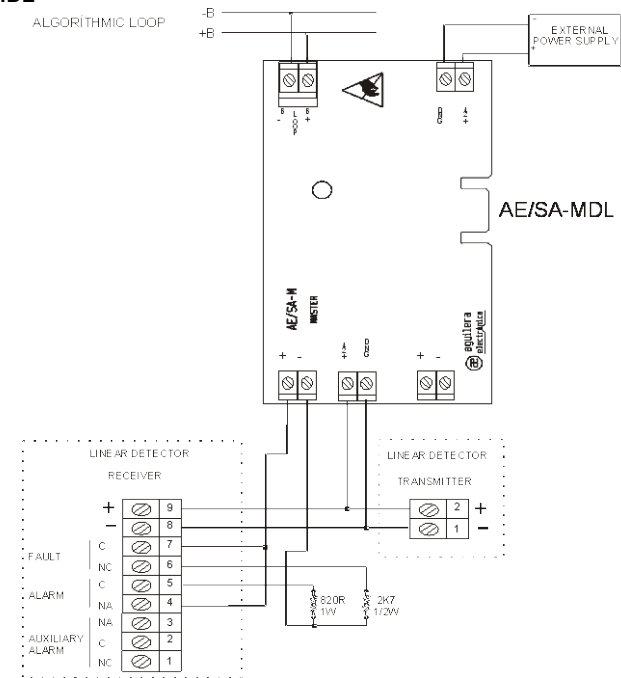
Module AE/SA-M



Module AE/SA-MC5



Module AE/SA-MDL



Once the connections have been made, close the module, taking care that the status LED remains visible.

VERIFICATION OF OPERATION

The modules 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. Make sure that the automatic extinguishing tripping functions are disabled. Make sure that the automatic extinguishing functions are disabled.

- When removing the module connection plug, the area should be put in the fault state. If this is not done, check it is correctly programmed in the Algorithmic Panel.
- Check that the module is working, by observing that it emits red colored flashes every 10 s, provided this function has not been inhibited individually. If the flashing is not inhibited and the module does not emit them, this means it has failed or the wiring is faulty.
- Activate the module output from the Algorithmic Panel. Check their activation in the module. The frequency at which the luminous indicator flashes will also increase.
- Restore the output to the idle state. To reset the system, press the RESET key on the Panel.
- Activate the loop detectors and check that the zone passes to alarm state in the Algorithmic Panel.
- To reset the system, press the RESET key on the Panel.