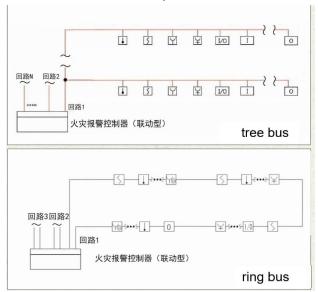
There are two forms of tree bus and ring bus in bus system.

The loop of the tree bus is unidirectional, and if a fault occurs at any point in the line, the equipment behind it cannot be used.

The loop of the ring bus is closed loop. With the help of the bus isolator, a fault at one point in the line will not affect the operation of the rest of the system.



Tree bus has low cost, simple construction route and convenient loop expansion. But the reliability is not as good as the ring bus.

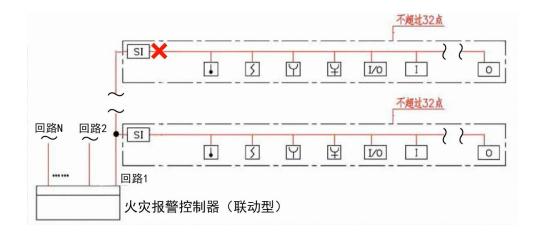
A bus short - circuit isolator is needed in a tree - bus system.

The total number of fire detectors, manual fire alarm buttons and modules protected by each bus short circuit isolator should not exceed 32 points.

This means that the total number of devices in each branch loop should not exceed 32 points.

When a branch circuit occurs a fault such as short circuit, the short circuit isolator will isolate the branch circuit, does not affect the normal operation of other branch circuit equipment.

When the fault is rectified, the isolator automatically reintegrates the isolated part into the system.



The ring bus has high reliability, but the controller needs to provide the ring bus interface, which is not convenient to expand the loop, the wiring is relatively complex, and the overall cost is high.

It is necessary to add a bus short - circuit isolator in the ring - bus system.

The total number of fire detectors, manual fire alarm buttons, and modules protected by two bus short-circuit isolators should not exceed 32 points.

When a fault such as short circuit occurs at a certain position in the bus, the short circuit isolators on both sides of the bus will act to isolate this section of line without affecting the normal work of other bus devices in the circuit.

When the fault is rectified, the isolator automatically reintegrates the isolated part into the system.

