

Differential heat fire detector contains two sensing elements and an algebraic summing circuit. Two switches, two comparators, a trigger, an AND element, a pulse generator, a pulse counter, and a microprocessor are included; the first output of the microprocessor is connected to the first inputs of the comparators, and the second output of the microprocessor is connected to the control inputs of the switches. The input of the first switch is connected to the output of the first sensing element, the input of the second switch is connected to the output of the second sensing element, the first output of the first switch is connected to the “+” input of the algebraic adder, the first output of the second switch is connected to the “-” input of the algebraic adder, the output of which is connected to the second input of the microprocessor. The second output of the first switch is connected to the second input of the first comparator; the second output of the second switch is connected to the second input of the second comparator, the output of which is connected to the second input of the trigger, the first input of which is connected to the output of the first comparator. The output of the trigger is connected to the first input of the AND element, the second input of which is connected to the output of the pulse generator. The output of the AND element is connected via a pulse counter to the first input of the microprocessor.