The typical characteristic of short circuit overload is heat.

We can monitor and alarm the short-circuit overload by monitoring the temperature of the line or connection point.

Temperature measuring electrical fire monitoring detector can detect the change of temperature parameters in the protected line, and can monitor the abnormal temperature of the line or connection point.

The detector shall be installed in the key heating parts of the cable connector terminal.

Temperature measuring electrical fire monitoring and detection includes signal processing unit and temperature measuring sensor.

Temperature sensor measures the change of temperature parameters in the protected line. It is generally composed of thermistor or infrared temperature measuring element.

The signal processing unit receives the measured data of sensor temperature and parameters and analyzes the data.

Linear fire detectors (cable type, air tube type, distributed fiber, fiber grating, linear multipoint type, etc.) can also be used as temperature measuring electrical fire monitoring detectors.

For the convenience of unified management, their alarm signals can be connected to the electrical fire monitor.

The main setting principles of temperature measuring type electrical fire monitoring detector are as follows:

- 1. For distribution lines whose protection object is 1000 volts or less, the temperature measuring type of electrical fire monitoring detectors shall be arranged in contact mode
- 2. For the power supply line whose protection object is more than 1,000 volts, the temperature measuring type electrical fire monitoring detector should be selected as the fiber grating temperature measuring type or infrared temperature measuring type electrical fire monitoring detector.

Fiber Bragg grating temperature measuring electrical fire monitoring detector should be set directly on the surface of the protected object.

3. Linear thermal fire detectors can also be used for electrical fire monitoring in power and cable parts.



According to the system form, the temperature measuring type electric fire monitoring detector includes two types: independent type and non-independent type.

Independent detector with sound and light alarm function, can be used independently.

The non-independent detector can be connected to the host computer (electrical fire monitoring equipment) through the signal processing unit.

Rely on electrical fire monitoring equipment to achieve system functions. It doesn't work independently.