

AS6020-00 / AS6021-00

ADDRESSABLE FAST RESPONSE MONITORING MODULES (CLASS A/B)



Application

The AS6020-00 / AS6021-00 Fast Response Contact Monitoring Modules are designed to be used with pull stations, water flow switches, and other applications requiring the monitoring of dry contact devices. The interrupt driven Digital Communications Protocol (DCP) combines maximum communication reliability and fast response to emergency conditions. Two different mounting configurations are provided to meet a wide range of applications. The AS6020-00 / AS6021-00 contact monitoring modules do not require a separate 24 VDC power source.

Operation

Each addressable contact monitoring module is programmed with its own unique Signaling Line Circuit (SLC) loop address. The device address is electrically programmable and stored in onboard EEPROM. Up to 127 devices can be placed on the DCP SLC loop. The modules supervises the wiring to the contact with an End Of Line (EOL) resistor. It can be programmed to monitor Normally Open (NO) or Normally Closed (NC) contacts. If a fault condition occurs in the wiring, the module sends a trouble status signal to the fire alarm control panel. When a change of status (contact changes state) is sensed by the AS6020-00 / AS6021-00, an interrupt is sent to the control panel indicating that an alarm has occurred. AS6021-00 version has built-in integrated SCI circuitry. In the event of a short on the S-SC line, the SCI circuit will activate and its yellow LED indicator will be turned on steady and the module will report the short circuit condition to the Fire Control Panel.

Standard Features

- UL 864 9th Edition Listed
- Single input contact monitor
- Optional built-in Short Circuit Isolator (AS6021-00)
- Fast, reliable contact monitoring utilizing the DCP (Digital Communication Protocol)
- Bi-colored indicating LED provides module status
- Yellow LED indicates short circuit condition (AS6021-00)
- 127 devices can be used per DCP loop
- Can be programmed to monitor Normally Open (NO) contacts (Class A or B circuits) or Normally Closed (NC) contacts (Class B circuits)
- Accepts up to 14AWG wires

Technical Specifications

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| Supply Voltage (S - SC) | 25.3 - 39 VDC |
| Average Current Consumption | 630µA Standby 6.3mA Alarm |
| Programmable Input | 1 Monitoring Input NC (Class B) or NO (Class A or B) |
| EOL Device (Class B circuits) | 10K Ohms Resistor |
| SCI on Resistance | 40 Ohm Max (Normal Condition) |
| SCI Fault Detection Threshold | 12 Volts (Typical) |
| SCI Isolation Current (Short Circuit Condition) | 10mA (Typical) |
| Maximum Quantity per Loop | 127 |
| Operating Temperature Range | 32°F to 120°F (0°C to 49°C) |
| Maximum Humidity | Up to 90% non-condensing |
| Dimensions | 4.2"(W) x 4.7"(H) x 1.4"(D) |
| Mounting | 4" Square Electrical Box |

Engineering Specifications

The contractor shall furnish and install where indicated on the plans, addressable contact monitoring modules AS6020-00 / AS6021-00. The modules shall be UL listed and compatible with the Fire alarm control panel. The device address shall be electrically programmable and stored in EEPROM. The modules shall be supplied with a plastic face plate and shall be suitable for mounting to a 4" square or double gang electrical back box. The modules shall provide a monitor LED that is visible through the face plate. AS6021-00 shall provide a SCI LED that is visible through the face plate.

