

**MRI-4021 / MRI-4021-ISO
PHOTOELECTRIC / HEAT SENSORS**

MRI-4021 / MRI-4021-ISO

Description

The MRI-4021/MRI-4021-ISO is a hardwired photoelectric and heat detector engineered to deliver early warning of fire conditions while minimizing false alarms. It employs advanced software algorithms to differentiate between genuine threats and common nuisances. The MRI-4021/MRI-4021-ISO can identify fires caused by contemporary synthetic substances such as polyurethane foam, thereby reducing risk of extensive damage.

Designed to be integrated with MGC compatible control panels, the MRI-4021/MRI-4021-ISO enables high rates of bi-directional communication for reliable oversight and fast response in the event of an emergency. Its compatibility with the full range of MIX-4000 series devices allows for flexible configuration and expansion, offering comprehensive coverage for spaces of any size. Additionally, the isolated version (MRI-4021-ISO) features a bidirectional short circuit isolator for an added protection against wiring faults and uninterrupted operation.

The detector comes with 360° visibility provided by dual LED indicators and a dust cover for added protection while shipping and installation. It can be mounted on the wall or ceiling by using any of the MRI-4000 standard or specialty bases. The detector is addressed and programmed using the MIX-4090 hand-held device. Addresses can be selected from a range of 1-240.

The MRI-4021/MRI-4021-ISO is listed to comply with UL 268th 7th edition, UL521, CAN/ULC S529 and CAN/ULC S530.

Features

- Designed to meet UL 268th 7th edition and CAN/ULC S529 Rev 4 standards.
- Utilize advanced software algorithms to differentiate between genuine fire alarms and false alarms.
- Protection against nuisance alarms caused by dust, insects, or other debris.
- Multiple sensitivity settings can be selected through the FACU.
- Dual LED indicators, offering 360° visibility with distinct colors for Alarms and Troubles.
- Link up to any combination of 240 MRI-4000 series devices on a single SLC loop.
- Compatible with the full series of MRI-4000 standard/specialty bases, input, and control modules.
- Sensor is easily addressed through the hand-held device programmer (MIX-4090).
- Listed for both wall and ceiling mounting using compatible bases.
- Magnet test option available to help with commissioning and maintenance.
- Isolated version (MRI-4021-ISO) equipped with a bidirectional short circuit isolator.
- Standard 4" and 6" bases have a detachable tab for labeling device address.
- Remote Output can be controlled by the FACU.
- Low standby current.
- Supports wire sizes ranging from 12 to 22 AWG.



Specifications

Normal Operating Voltage	15 to 30 VDC
Maximum Alarm Current	3.2 mA (LED on)
Standby Current	160 μ A (LED flashing)
UL/ULC Listed Temperature Range	32°F to 100°F (0°C to 37.8°C)
Operating Temperature	15°F to 120°F (-9°C to 49°C)
Humidity	10% to 93% Non-condensing
Wiring range on terminals	22 to 12 AWG
Diameter	4.25"
Height	1.75"

Detector LED colors	Description
RED (Steady on)	ALARM condition
GREEN (Flash)	NORMAL condition
AMBER (Steady on)	FAULT condition

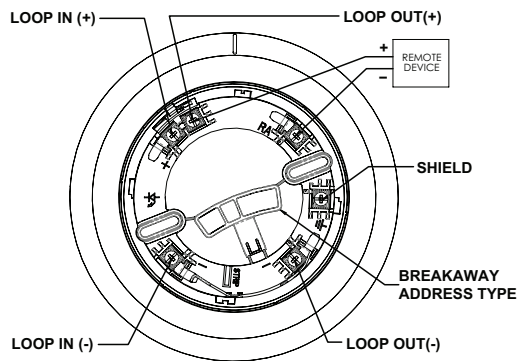
Heat Detection Settings

135°F (57°C)
135°F with rate of rise as per UL268

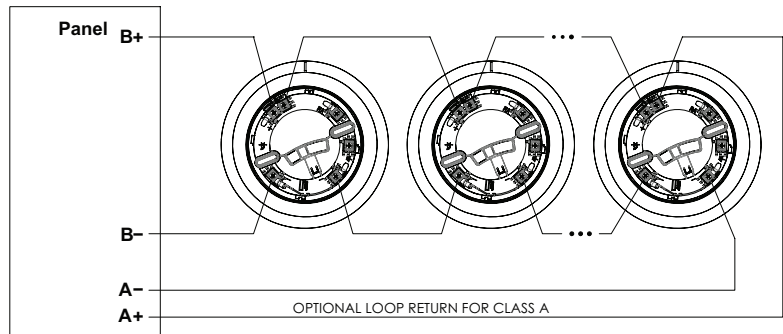
Sensitivity Level	Typical	Note
Hot	1.25%/FEET	Most sensitive level
Medium	2.50%/FEET	
Cold	2.75%/FEET	Least sensitivity level

Detector Wiring: For complete installation instruction refer to LT-6711SEC User Manual

DETECTOR WIRING



LOOP WIRING



Ordering Information

Model	Description
MRI-4011	Photoelectric Smoke Detector (Non-Isolated)
MRI-4011-ISO	Photoelectric Smoke Detector (with short-circuit isolator)
MRI-4021	Photoelectric / Heat Detector (Non-Isolated)
MRI-4021-ISO	Photoelectric / Heat Detector (with short-circuit isolator)
MRI-4030	Heat Detector (Non-Isolated)
MRI-4030-ISO	Heat Detector (with built-in short circuit isolator)
MRI-4001	6" Detector Base
MRI-4002	4" Detector Base
MRI-4003-S	Sounder Base
MRI-4003-R	Relay Base
MIX-4090	Addressable Device Programmer