

INSTALLATION AND MAINTENANCE INSTRUCTIONS

MRI-4045-M MULTI-RELAY MODULE

ABOUT THIS MANUAL

This manual is included as a quick reference for installation. For further information on the use of this device with a FACP, please refer to the panel's manual.

Note: This manual should be left with the owner or operator of this equipment.

DESCRIPTION

The MRI-4045-M multi-relay module provides 8 form C (SPDT) contacts rated at 2A @ 30VDC or 0.5A at 125VAC resistive loads from power limited sources. The relays are programmable and a compatible panel can switch individual contacts as required. The module also supports group activation capability for fast reaction time.

The SLC is power limited and the module does not supervise circuit connections to the relay contacts. The relays are power limited if wired to a power limited source.

The MRI-4045-M is compatible with MR-400, MR-401 and MMX™-4000 fire alarm control panels and is designed to meet UL 864, 10th Edition and ULC S527, 4th Edition requirements for devices.

The SLC and power connections are on opposite corners of the device for easy installation. The address of each module is set using the MIX-4090 programmer tool and up to 240 units may be installed on a single loop. The module has LED indicators for each relay to signal activation (red). A green LED shows SLC communication status and finally, two yellow LEDs indicate if a short circuit has been isolated on either side of the SLC connection.

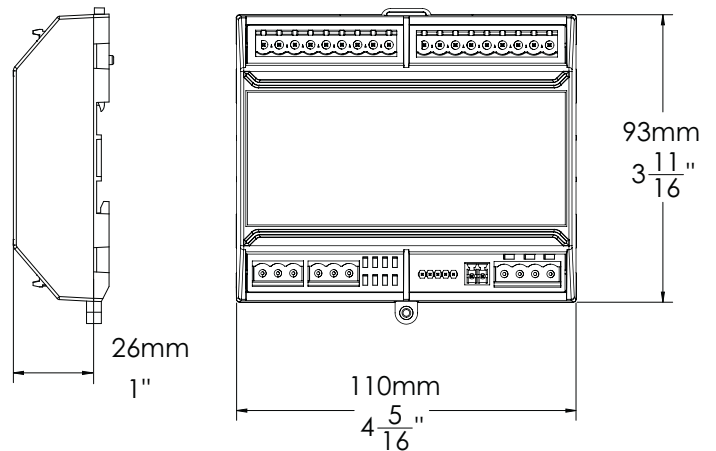
Accessories

MMX-BB-4002R	Back Box and Red Door for 1 or 2 MRI-4000-M Series Modules
MMX-BB-4006R	Back Box and Red Door for up to 6 MRI-4000-M Series Modules

RELATED DOCUMENTS

- LT-6736SEC MMX-BB-4002R and MMX-BB-4006R Installation Instructions
- LT-6749 MGC-4000-BR DIN Rail Kit Installation Instructions

FIGURE 1: MODEL FRONT AND SIDE VIEW

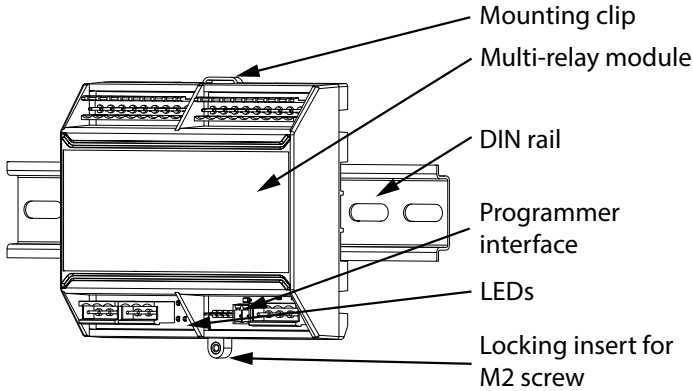


SPECIFICATIONS

Normal Operating Voltage:	UL tested 15 to 30VDC UL rated 17.64 to 27.3 VDC
Alarm Current:	8.3 mA
Standby Current:	1.9 mA
Temperature Range:	0°C to 49°C (32°F to 120°F)
Humidity Range:	10% to 93% non-condensing
Dimensions:	110 mm x 93mm (4 5/16 x 3 11/16 in)
Terminal wire gauge	12-22 AWG

KEY COMPONENTS

FIGURE 2: MULTI-RELAY MODULE ASSEMBLY COMPONENTS



The MRI-4045-M multi-relay module as shown in figure 2 is designed to fit on a DIN rail. The M2 screw can be used to lock its position.

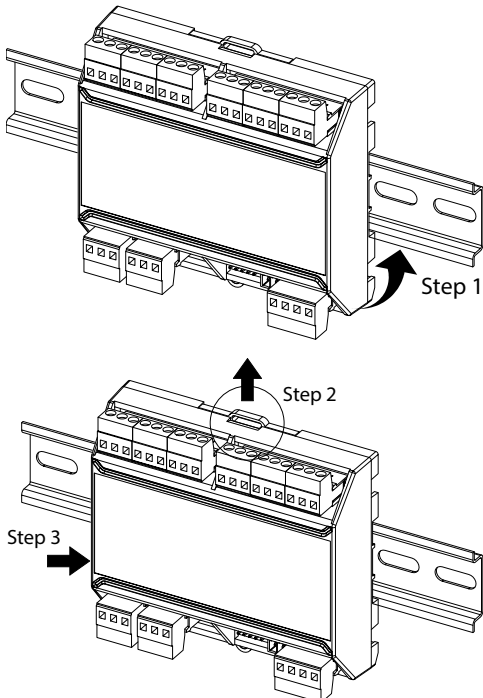
Note: This device must be installed as per applicable requirements of the authorities having jurisdiction.

MOUNTING

Units in the multi module series can be mounted on a top-hat style 35mm wide DIN rail included in the Secutron listed enclosures:

- MMX-BB-4002R for 1 or 2 modules (see document LT-6736SEC) or equivalent Listed enclosure of the same size or larger (see document LT-6749).
 - MMX-BB-4006R for up to 6 modules (see document LT-6736SEC) or equivalent Listed enclosure of the same size or larger (see document LT-6749).
1. Hook the multi module device onto the bottom of the DIN rail with three teeth.
 2. Push the mounting clip upward with a flat screwdriver.
 3. Push the multi module device onto the DIN rail and release the clip.

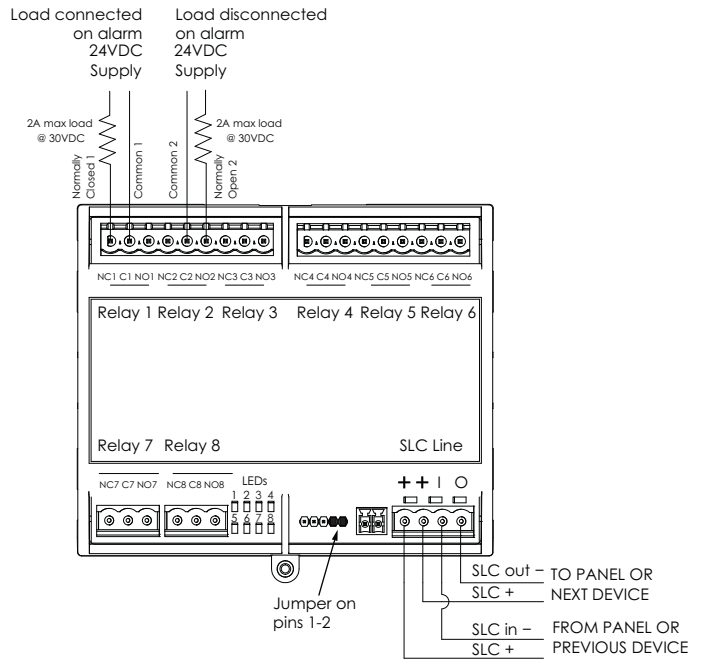
FIGURE 3: MOUNTING DIAGRAM



WIRING

Before installing this device, seek guidance from the compatible control panel instructions for the device's operation modes and the configuration requirements. It is recommended to disconnect the SLC line before performing installation or service.

FIGURE 4: DEVICE CONNECTION – RELAY WIRING



Note: A factory-installed jumper is required between pins 1 and 2 of the J1 connector (next to the programmer connector).

All connections to field wiring are done with plug-in terminal blocks.

Use the information in this document to determine the total current draw of the devices. In all cases, the installer should consider the voltage drop to ensure that the last device on the circuit operates within its rated voltage. Please consult the FACP documentation for more information.

POWER LIMITED WIRING

Group all power limited wiring together. Connect either power limited wiring or non-power limited wiring to each of the groups shown in figure 5. Do not mix power limited wiring and non-power limited wiring within the same group.

FIGURE 5: POWER LIMITED WIRING

Do not mix power limited wiring and non-power limited wiring within the same group.

