# MIR-65 Series Four-Wire Relay Bases Installation Sheet

### Note:

These relay bases are intended for use with MIR-65 Series smoke detectors and a compatible control panel. They must not be used with any other type of detector.

### MSB-65B-4 Relay Base

Provides one set of volt-free, form C (changeover) contacts that change state when the detector signals an alarm. The coil of the relay is connected across base terminals L1 IN and -R. It is essential that L1 IN is connected to the positive supply line from the control unit.

## MSB-65B-4R Auxiliary Relay Base

Provides two sets of volt-free, form C contacts to facilitate the switching of a remote LED or other auxiliary device.

### **Operation**

The current limited output available at terminal -R of all MIR-65 Series detectors enables the relay connected to this terminal to be operated over a supply voltage range of 9 to 33 volts. It is essential that the supply to the detector does not fall below 9 volts when the detector signals a fire alarm. The relay resets when the detector is reset or the supply voltage falls below its drop-out value.

## Application

These relay bases are primarily intended for use with control panels using four-wire detector supply and alarm initiating circuits. They are not suitable for use in systems where it is specified or required that operation of the auxiliary system shall be fail-safe.

### Warning:

These relay bases must not be connected to a main supply. The maximum voltage applied to the relay contact terminals must not exceed 50V AC and 75V AC.

When required, use the auxiliary contacts of base MSB-65B-4R to switch a low current remote LED. Never connect a remote LED indicator or other device to the -R terminal.

### Installation

Before installing these relay bases, check the continuity, polarity, and insulation resistance of all wiring. Confirm that siting is in accord with fire system drawings and conforms to all applicable local codes such as NFPA 72.

Use 3" octagonal box for direct connection to the base. 4" octagonal and 4" square boxes may be used with proper UL listed mounting brackets. When mounting on a wall, install 4" to 12" from the ceiling. Use 3M Weatherban 606 Non-Flammable sealing compound (or equivalent) to seal field wiring conduit opening in the electrical box. This will reduce the stack effect.

Check that the mounting surface for the base is substantially flat, then secure the base to the wiring box using appropriate screws. Do not over-tighten the screws. Use the raised web on the side of the base for aligning the detector's LED.

Connect wiring to base terminals in accordance with the fire system wiring diagram. Terminate any screen or earth wires to the unconnected ground terminal. Plug in specified MIR-65 detector and, where security demands, turn the tamper resistant 1.5mm hexagonal socket screw clockwise into the head until the head cannot be removed from the base.

# **Specifications**

**Environment:** Indoor; non-icing; non-condensing **Temperature Range:** -22°F (-30°C) to 158°F (70°C) storage

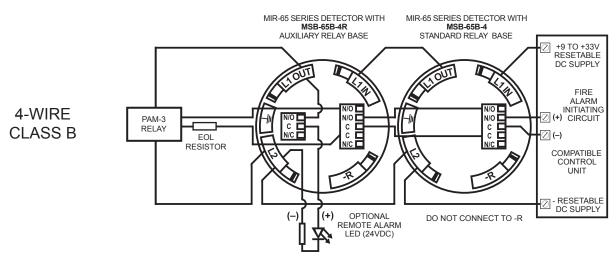
32°F (0°C) to 100°F (38.2°C) operating

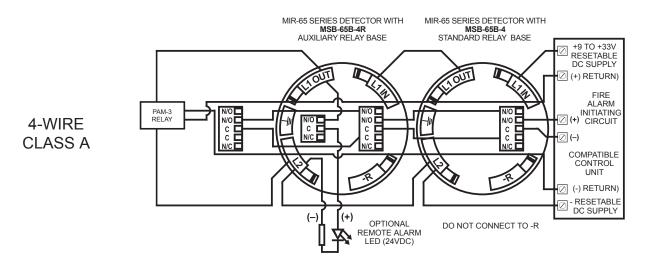
**Humidity:** 0 to 95% RH

**Base material:** white polycarbonate V-O to UL94

Max. switching power:30 W; 50 VAMax. switching current:1A (resistive load)Max. switching voltage:50 V AC; 75 V DCMin. capability:10 μA; 10 mV DCDrop-out voltage:<6 V (minimum 0.9 V)</th>Coil current:15 mA with supply above 9 V

# Wiring





### Canada

25 Interchange Way Vaughan, ON L4K 5W3 Tel: (905) 660-4655 Fax: (905) 660-4113

### U.S.A.

60 Industrial Parkway Cheektowaga, New York 14227 Tel: (888) 660-4655

Tel: (888) 660-4655 Fax: (888) 660-4113

