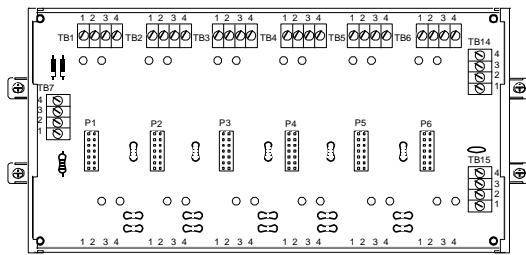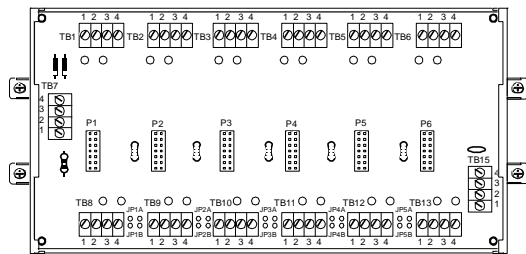## Product description

UIO6

UIO6R

The Signature Series Universal Input/Output Motherboards (SIGA-UIO6 and SIGA-UIO6R) provide mounting and wiring terminations for up to six M series modules.

The SIGA-UIO6 provides two input/output buses common to all modules (TB14 and TB15). The SIGA-UIO6R provides one input/ output bus common to all modules (TB15) and six individual inputs/outputs (TB8 through TB13) for flexibility. Jumpers, located between the modules, facilitate sharing of common inputs/outputs between adjacent modules to minimize wiring.

Both boards provide six terminal blocks to handle the inputs and outputs for individual modules installed on the motherboard (TB1 through TB6). The Signature Data Circuit (SDC), which provides communication to all the modules, is connected at a single location (TB7).

The motherboard mounts in an MFC-A cabinet or other suitable equipment enclosure with screws and washers provided. Each MFC-A will hold one SIGA-UIO6 or SIGA-UIO6R motherboard complete with their full complement of modules. See "Specifications" for a list of compatible enclosures.

Modules plug into the motherboard at any of the six locations, and captive screws fasten them to the motherboard. All module field wiring goes to terminal blocks on the motherboard to permit rapid removal and replacement for troubleshooting.

Specifications

Capacity: Six M series plug-in modules
Terminal capacity: 12 AWG (2.5 sq mm) to 18 AWG (0.75 sq mm)
Compatible boxes: MFC-A, 2-WB(X) series, 3-CAB series, RACCR series, 3-RCC series, or any UL listed fire alarm enclosure that meets clearance requirements below and complies with the "Installation Instructions"

Clearance space: 1 inch minimum all around the UIO6 or UIO6R, 1/2 inch above the M series modules, and in accordance with the National Electrical Code
Dimensions (H x W x D): 4.30 in (10.9 cm) x 9.56 in (24.28 cm) x 0.87 in (2.2 cm) + 2.25 in (5.7 cm) module depth
Storage temperature: -4 to 140 °F (-20 to 60 °C)
Operating environment
Temperature: 32 to 120 °F (0 to 49 °C)
Humidity: 93% RH, noncondensing at 90 °F (32 °C)

Installation instructions

In cabinets that house only one SIGA-UIO6 or SIGA-UIO6R motherboard:

- Group all modules with nonpower-limited sources to the right of the motherboard and route their wiring to the right

- Group all modules with power-limited sources to the left of the motherboard and route their wiring to the left

- Maintain 1/4-inch separation between power-limited and nonpower-limited wiring, or use FPL, FPLR, FPLP, or an equivalent in accordance with the National Electric Code.
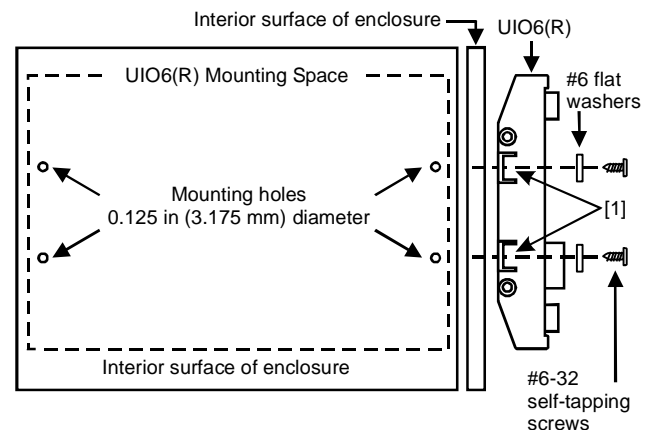
Installations with multiple SIGA-UIO6 or SIGA-UIO6R motherboards or enclosures that include other wiring require FPL, FPLR, FPLP, or equivalent NEC-approved wiring for all power-limited wiring.

Observe supervision and power-limited vs. nonpower-limited circuits, as found on the M series installation sheets.

WARNING: Disconnect power to cabinets before installing or removing components. Failure to do so may result in serious injury or loss of life.

To install the SIGA-UIO6 and SIGA-UIO6R:

1. See "Specifications" to determine the correct enclosure and clearance space for a particular motherboard.

2. Use the motherboard to mark the mounting hole locations.

3. Drill 0.125 in (3.175 mm) mounting holes.

4. Mount the motherboard in the cabinet using the screws and washers provided.
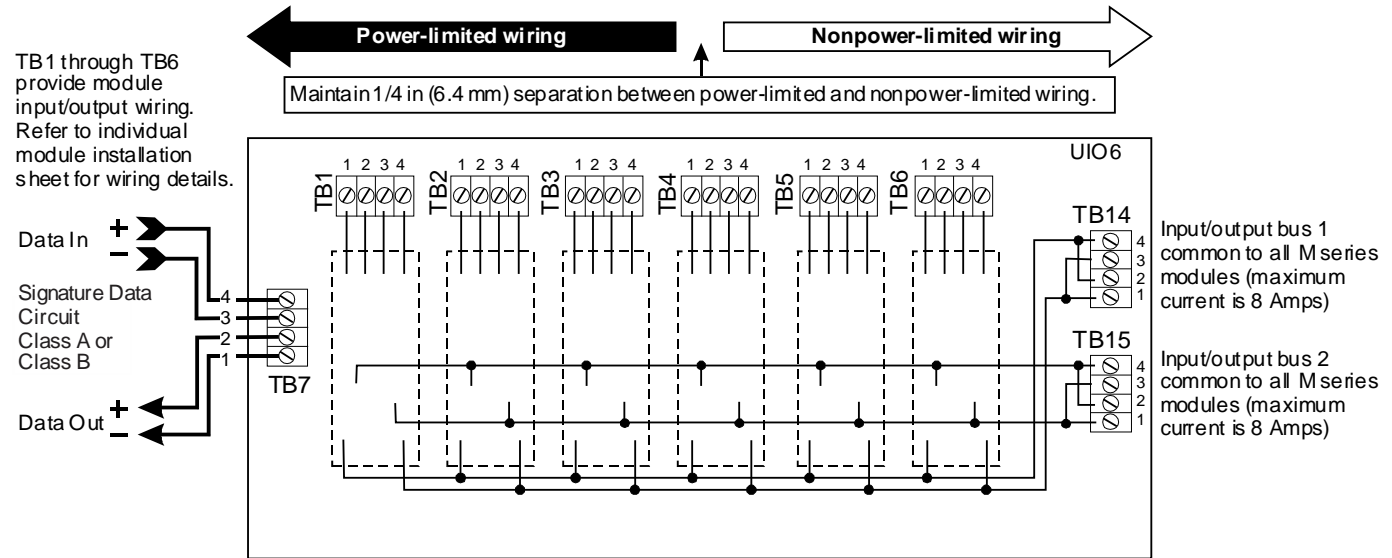
Notes

[1] Mark the mounting hole locations here

2. See the installation sheets of the individual M series modules for mounting instructions to the SIGA-UIO6 or SIGA-UIO6R
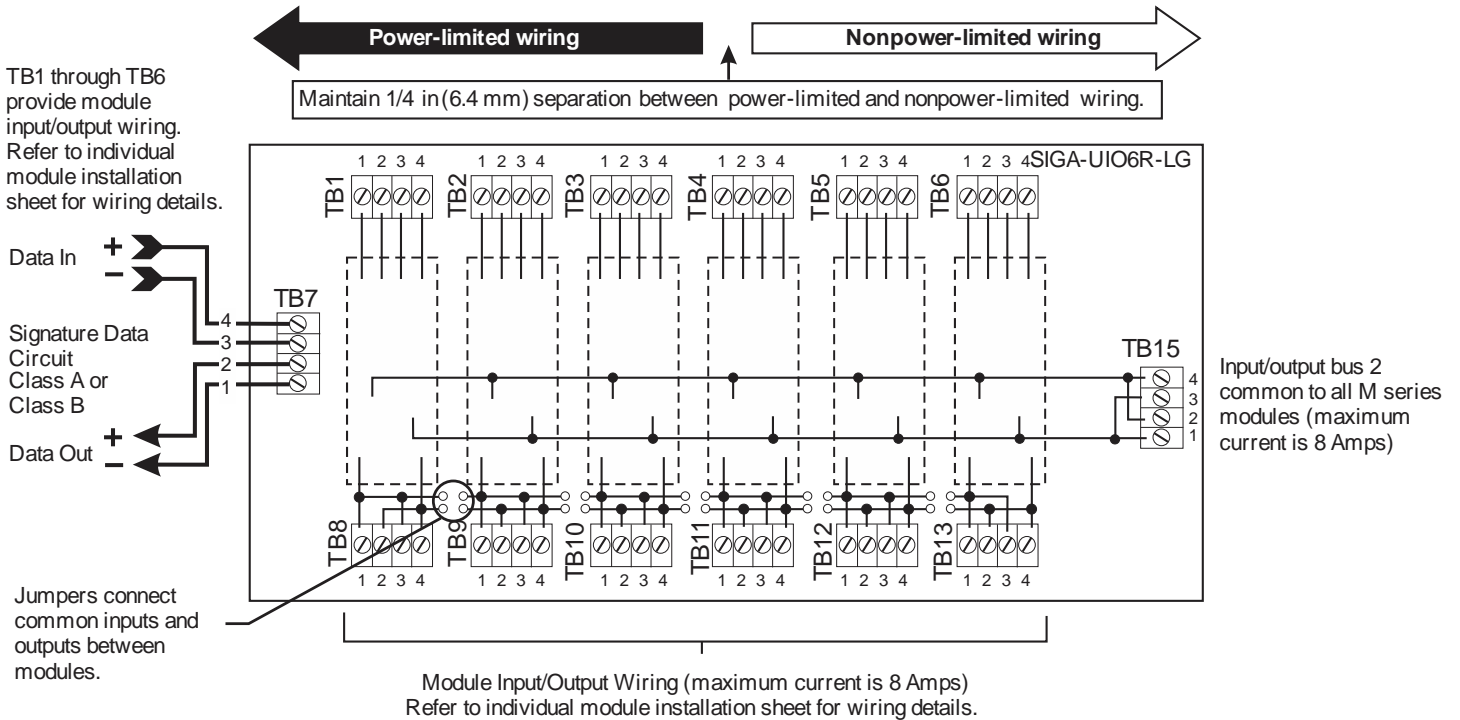
Wiring diagrams

SIGA-UIO6

TB1 through TB6 provide module input/output wiring. Refer to individual module installation sheet for wiring details.

Wire size must be capable of handling fault current from nonpower-limited source.

SIGA-UIO6R

TB1 through TB6 provide module input/output wiring. Refer to individual module installation sheet for wiring details.

Jumpers connect common inputs and outputs between modules.

Wire size must be capable of handling fault current from nonpower-limited source.