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## CMF-300 Control Module Installation Instructions

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### Specifications

Normal Operating Voltage:	15 to 32VDC
Average Operating Current:	375µA (LED flashing - in group poll mode) 350µA (LED of flashing - in direct poll mode) 450 µA Max. (Communicating, NAC Shorted)
Maximum NAC Line Loss:	4 VDC
External Supply Voltage (between Terminals T3 and T4)	
Maximum (NAC):	Regulated 24VDC
Maximum (Speakers):	70.7 V RMS, 50 W
Max. NAC Current Ratings:	For class B wiring system, the current rating is 3A For class A wiring system, the current rating is 2A
Temperature Range:	32°F to 120°F (0°C to 49°C)
Humidity:	10% to 93% Non-condensing
Dimensions:	4 <sup>1</sup> / <sub>2</sub> " H × 4" W × 1 <sup>1</sup> / <sub>4</sub> " D (Mounts to a 4" square by 2 <sup>1</sup> / <sub>8</sub> " deep box.)
Accessories:	SMB500 Electrical Box; CB500 Barrier

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### Before Installing

This information is included as a quick reference installation guide. Refer to the control panel installation manual for detailed system information. If the modules will be installed in an existing operational system, inform the operator and local authority that the system will be temporarily out of service. Disconnect power to the control panel before installing the modules.

**NOTICE:** This manual should be left with the owner/user of this equipment.

### General Description

CMF-300 Supervised Control Modules are intended for use in addressable, two-wire systems, where the individual address of each module is selected using the built-in rotary switches. This module is used to switch an external power supply, which can be a DC power supply, to notification appliances. It also supervises the wiring to the connected loads and reports their status to the panel as NORMAL, OPEN, or SHORT CIRCUIT. The CMF-300 has two pairs of output termination points available for fault-tolerant wiring and a panel-controlled LED indicator. This module can be used to replace a C304 module that has been configured for supervised wiring operation.

### Compatibility Requirements

To ensure proper operation, these modules shall be connected to listed compatible system control panels only.

### Mounting

The CMF-300 mounts directly to 4" square electrical boxes (see Figure 2A). The box must have a minimum depth of 2<sup>1</sup>/<sub>8</sub>". Surface mounted electrical boxes (SMB500) are available.



All relay switch contacts are shipped in the standby state (open) state, but may have transferred to the activated (closed) state during shipping. To ensure that the switch contacts are in their correct state, modules must be made to communicate with the panel before connecting circuits controlled by the module.

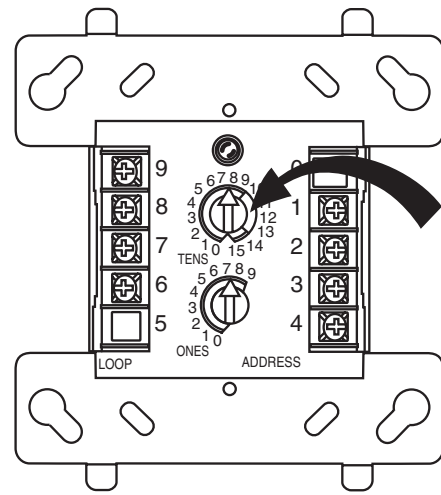
**Wiring**

NOTE: All wiring must conform to applicable local codes, ordinances, and regulations. When using control modules in non-power limited applications, the CB500 Module Barrier must be used to meet UL requirements for the separation of power-limited and nonpower-limited terminals and wiring. The barrier must be inserted into a 4" x 4" x 2 1/8" junction box, and the control module must be placed into the barrier and attached to the junction box (Figure 2A). The power-limited wiring must be placed into the isolated quadrant of the module barrier (Figure 2B).

1. Install module wiring in accordance with the job drawings and appropriate wiring diagrams.
2. Set the address on the module per job drawings.

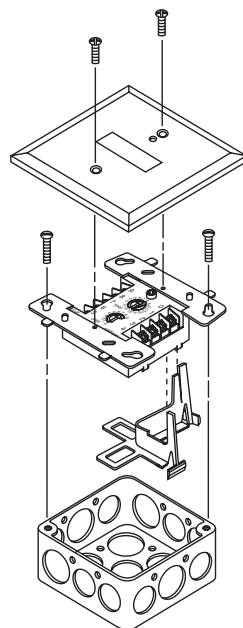
NOTE: Some panels support extended addressing. In order to set the module above address 99 on compatible systems, carefully remove the stop on the upper rotary switch with thumb in the direction shown in Figure 1. Secure module to electrical box (supplied by installer), as shown in Figure 2A.

**Figure 1A. Controls and indicators:**



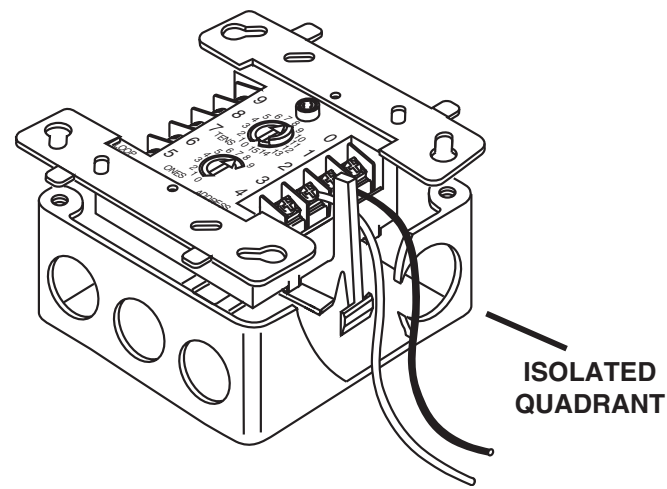
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**Figure 2A. Module mounting with barrier:**



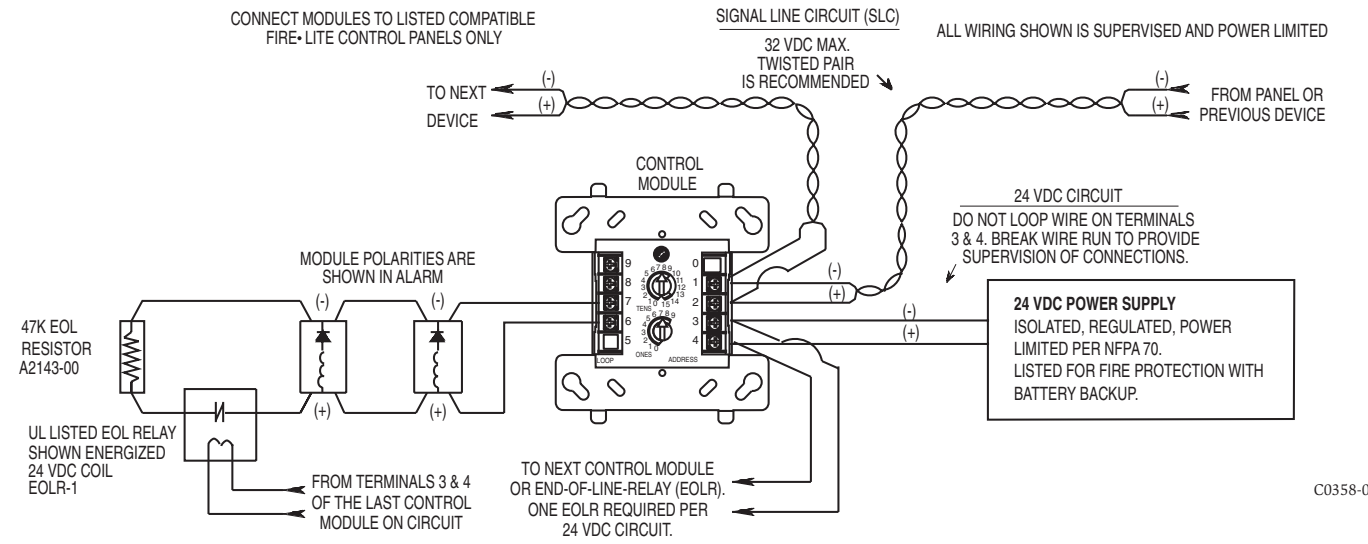
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**Figure 2B:**



C0219-00

**Figure 3. Typical Notification Appliance Circuit configuration, NFPA Style Y (Class B):**



**Figure 4. Typical fault tolerant Notification Appliance Circuit configuration, NFPA Style Z (Class A):**

