



M200 / M400 / M600 Electrician's Guide

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Overview

- Install the END-OF-LINE DIODE (provided by Smoke Guard) at the INITIATING DEVICE, not at the housing.
- Run the ALARM CIRCUIT from the INITIATING DEVICE to the HOUSING.
- Provide a SERVICE DISCONNECT SWITCH and AC POWER to the HOUSING.

Revision History			
Revision	Date	Author	Notes
A	11/7/2024	D. Canaday	Added Battery and FSCS details
Y	9/24/2024	D. Canaday	Initial Release

Electrical Contractor Responsibilities

Alarm Circuit

- Install conduit (if needed) and run two 18 or 20 AWG stranded wires between the housing junction box and the initiating device.
- At the junction box, connect the wires to the low-voltage purple and grey wires inside.
- Install the Smoke Guard EOL-Diode (P/N 12127) in parallel with the wires at the initiating device's normally-open contacts. The order of the wires does not matter.
- If systems are located close to each other, up to four systems can be connected to the same initiating device using a single EOL-Diode. In this case, wire polarity is important: match grey to grey and purple to purple.

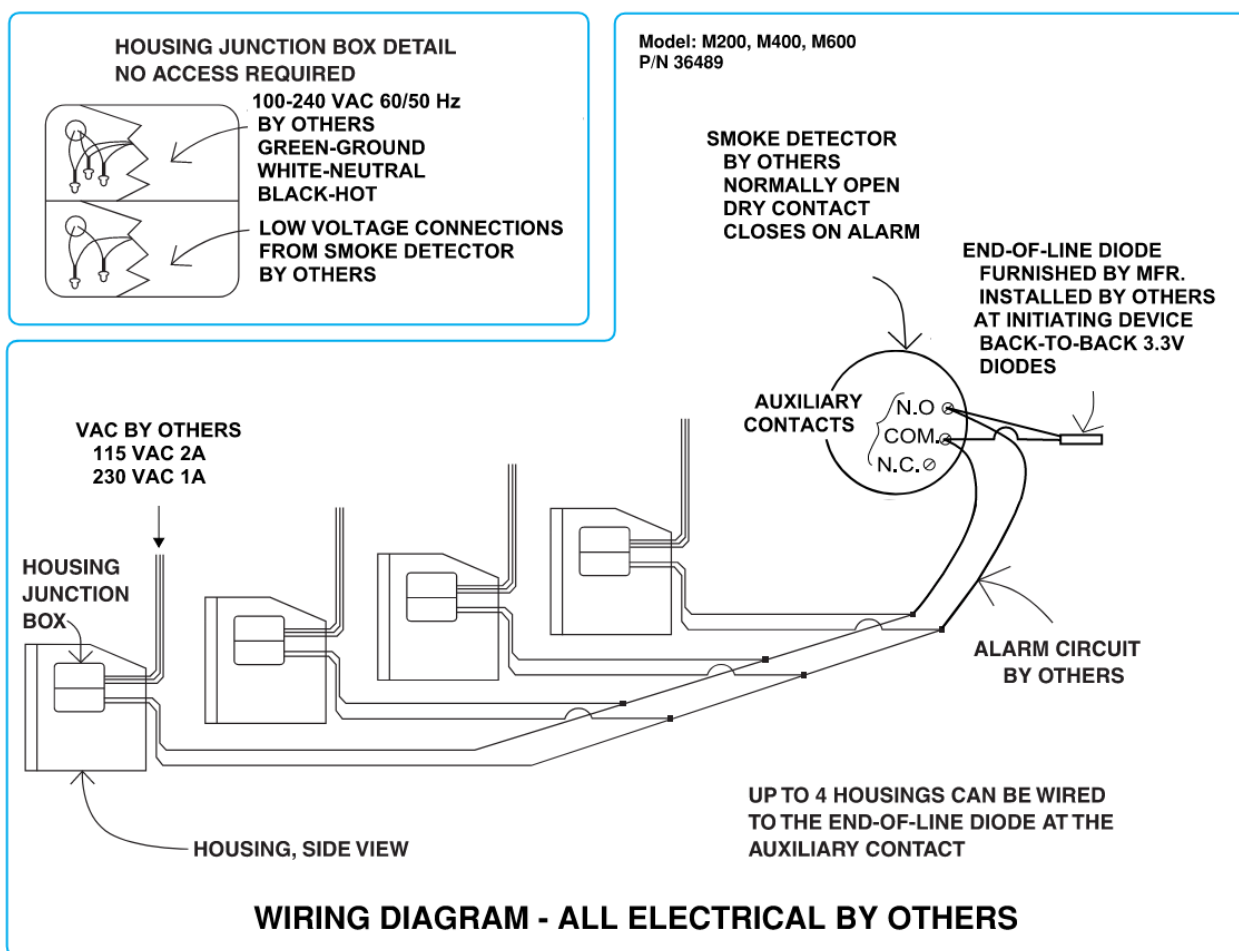


Figure 1 – Wiring Diagram

AC Power

- Power specification: 100-240VAC, 50/60 Hz, 2A at 115VAC or 1A at 230VAC.
- Run the main power wiring through a ½" conduit into the housing junction box and connect to the housing wiring: L (Live), N (Neutral), and G (Ground).
- Install a service disconnect switch near the control station.

Rechargeable Battery Circuit (Optional Feature)

- When operating on battery backup, the unit will maintain full functionality for a minimum of 10 hours. During this period, the unit may cycle up to 10 times without reducing the 10-hour reserve.
- The battery has a service life of 5 years. Replace with Smoke Guard part number 24540.

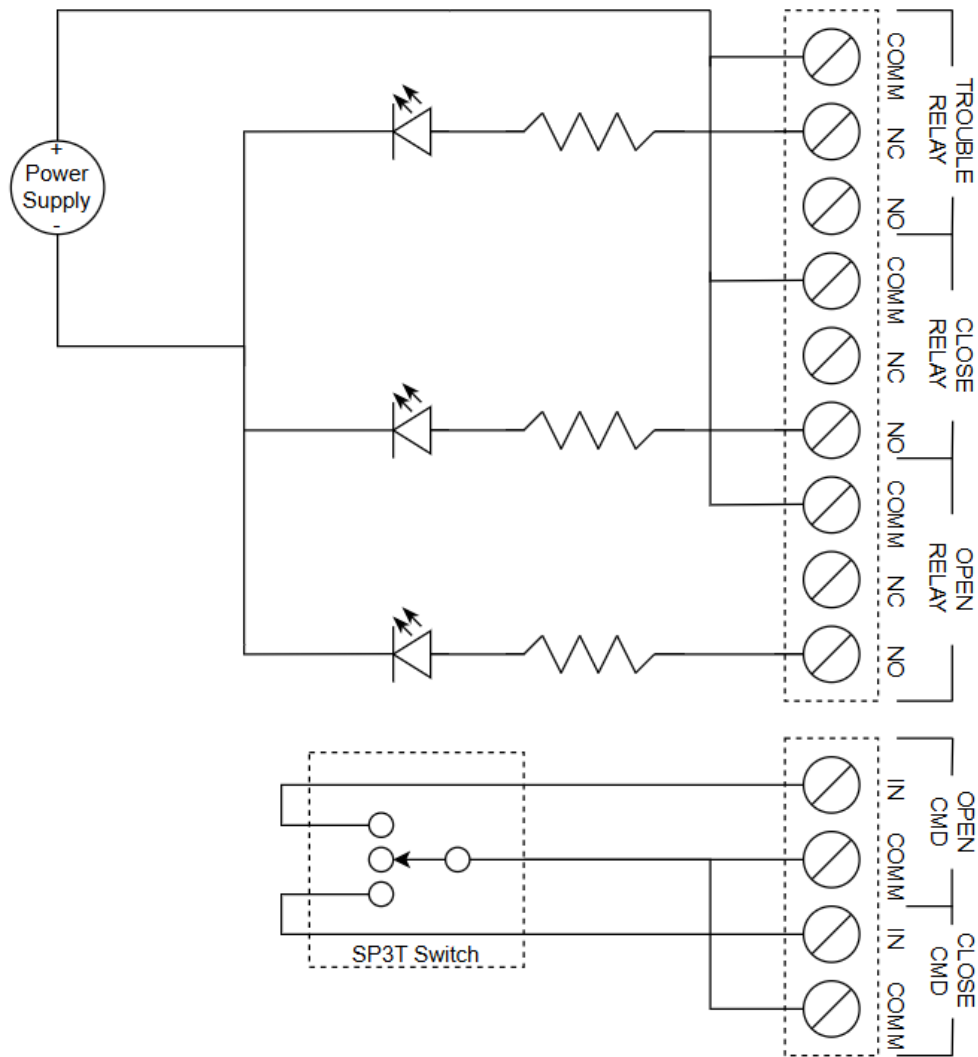
Firefighters Smoke Control Station (Optional Feature)

- Smoke Guard offers an FSCS (Firefighter's Smoke Control Station) option within the controller that requires wiring connections (to be completed by others) at the FSCS panel. The system uses three Form C relays to indicate the status of the smoke curtain:
 - Close Status Relay: Indicates when the curtain is fully closed.
 - Open Status Relay: Indicates when the curtain is fully open.
 - Trouble Status Relay: Signals a fault or malfunction in the curtain system.
- Each relay provides Normally Open (NO) and Normally Closed (NC) contacts, allowing flexibility for the user to integrate with the FSCS panel's monitoring system as required.

Status	Relay Contact	Description
Trouble	NC/COMM	Relay is energized when there is no fault
Close	NO/COMM	Relay is energized when the screen is closed
Open	NO/COMM	Relay is energized when the screen is open

Note that Trouble is wired with inverted logic, this is necessary such that when there is a power failure the Trouble relay de-energizes signaling a fault (the power failure).

Typical wiring to FSCS panel



Connecting Wires at the Controller

Field connections are only necessary during a controller replacement.

Motor Cable

- Connect the motor whip to the controller motor cable and secure with a zip tie.

100-240 VAC

- Connect the C13 plug to the power inlet module on the controller and secure with a zip tie.

Screen Rewind Switch and Alarm circuit

- Connect the low-voltage 10-pin harness to the controller and secure with a zip tie.