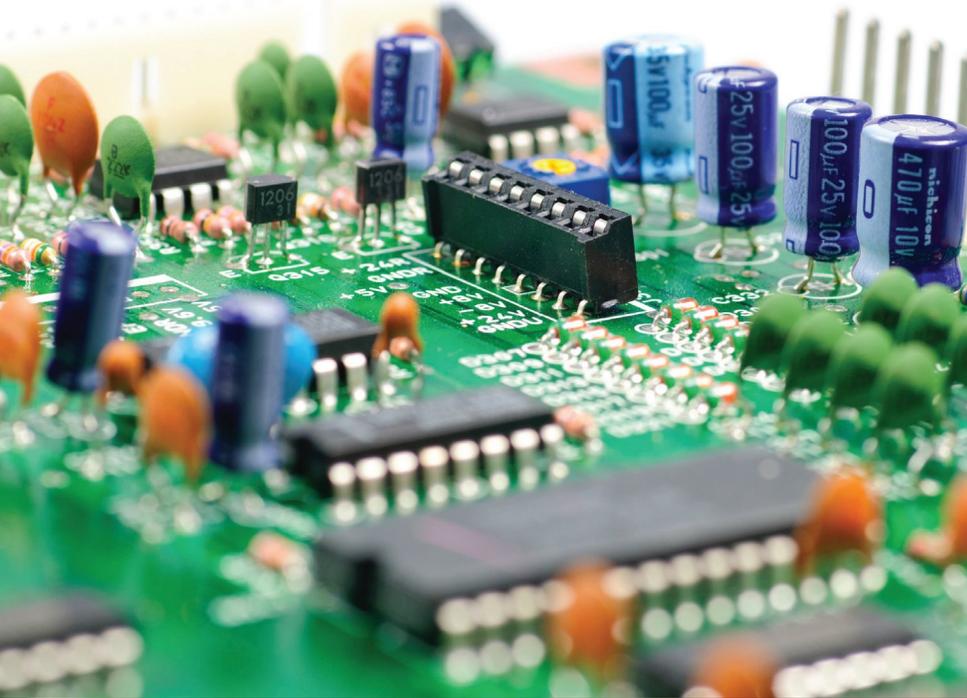




A **VANTAGE** Company



# FM1

The advanced  
**Door Lock Monitor**  
designed to work  
with any of today's  
elevator Controllers



The deadline to comply with  
NYC Building Code 2.26.5 and  
3.10.12, Appendix K is Jan. 1, 2020

**FM1 allows you to be ready**



A **VANTAGE** Company

## FM1's Universal Design Works With Any Of Today's Controllers.



*When one considers the scale of the challenge due to recent NYC Elevator Code changes and the short deadline, choosing FM1 is the logical choice.*

We patented the industry's first Door Lock Monitor in 1978. We have continued to refine that innovation and that has led to FM1. Highly advanced, FM1 features a non-proprietary, universal design, permitting it to be used in any Controller on the market today.

## By January 1, 2020 all NYC Elevators Must Utilize A Door Lock Monitor To Comply With Code.

Due to changes to the NYC Elevator Code (2.26.5 and 3.10.12, Appendix K) all elevators must utilize a Door Lock Monitor by 2020 to be in compliance. When either jumped or faulty door circuits are detected the door lock monitor must:

- **provide an alarm relay (as an audible or visual fault indicator)**
- **prevent door closure (or reopen car doors if a door fault is detected during closing)**
- **halt car movement until the fault (including faulty door contact, hoistway door interlock contacts, or both sets of contacts of a swing door interlock) has been cleared.**

## FM1 is always on guard.

Putting aside all the various mechanical parts of a door operator and car door that must work in tandem, basically an elevator "knows" when to close and depart because an electrical signal is created and sent from the Controller. That signal is created when monitoring sensors within the car door gate switch and in the interlock contact on the landing door, complete an electrical circuit. When all contacts are made, then the Controller knows it's safe to move the elevator. The system is highly reliable and has proven to be an effective way to do the job. However, it does offer a way where a maintenance mechanic could create an artificial bridge, or jumper. This would permit the door to stay open so service could be performed, by making it appear to the control that the door was actually closed.



*FM1 offers NYC elevator industry professionals a solid solution to meet 2020 compliance issues with NYC Elevator Code 2.26.5 and 3.10.12, Appendix K.*

FM1 utilizes this closed-circuit approach but takes it a step further. FM1 demands that the electrical signals move forward in a predetermined order. And if that specific sequence isn't followed, then the door will appear to the control as open, it will then keep the car from moving and sound an alarm.

This means that FM1 meets the new Code provision by constantly monitoring the car and preventing operation with the doors open, regardless of whether an incorrect signal is relayed from the car door contact or landing door contact. This capability to detect faults from bypassed car door contacts makes it virtually impossible to physically jump the electrical circuit and bypass elevator safety features, either intentionally or accidentally. In essence, it's a mechanical watchdog that's always on guard for door faults of any kind.

## FM1: Features

- **Detects jumped or faulty door circuits and prevents car movement in the event of door failure (permitting simple system compliance with provisions of NYC Building Code 2.26.5 and 3.10.12, Appendix K— required by 2020).**
- **Separate commons for different circuits.**
- **Universal inputs (24V-250 VAC or DC).**
- **On-board diagnostics/troubleshooting LEDs.**
- **Alarm relay permits audible or visual indication of presence of fault.**

## FM1: The Smarter Choice

- **Offers a non-proprietary design.**
- **In stock now and easy to install.**
- **Universal design permits FM1 to work with any control platform.**
- **Lets you meet Code requirements without a full mod job.**
- **Two standard models cover all your Door Lock Monitor needs: FM2-0001N for Front Opening cars and FM2-0002N for Front and Rear openings.**
- **Tech Support always available.**
- **PE Approved drawing modification services can be provided.**
- **Tried. Trusted. Proven.**

## FM1: Electrical Specifications

- **Utilizes power supply from existing Controller (110-240 VAC).**



# FM1

The **Door Lock Monitor** designed to work with any Controller on the market today.

FM1\_0419