

PERTRONIC INDUSTRIES LTD

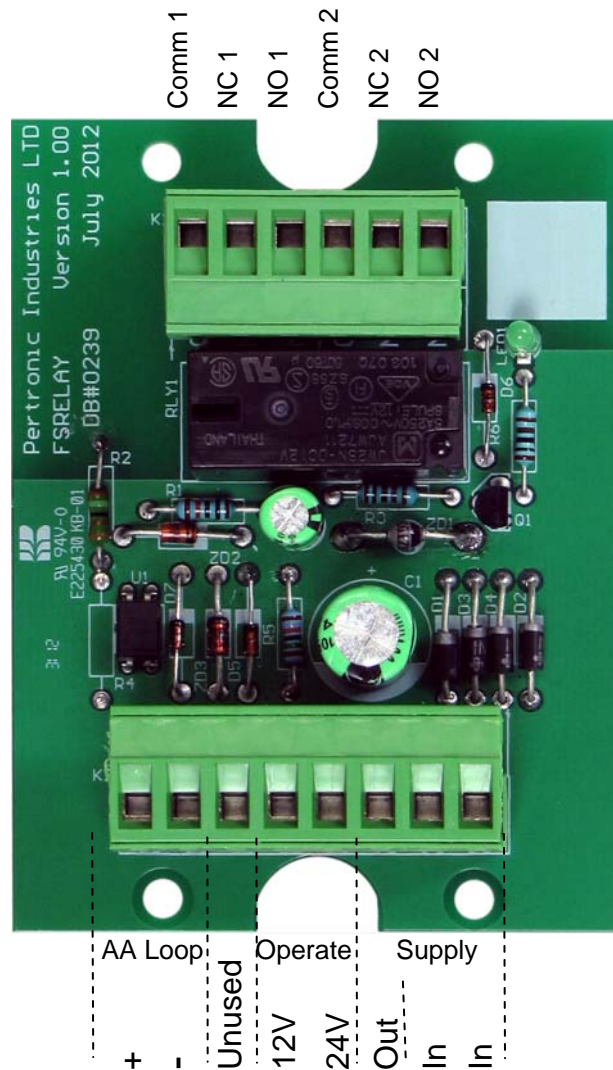
INSTALLATION NOTE

FailSafe Relay Board (FSRELAY)



Overview

The Failsafe Relay Board provides a fail-safe release for a relay which is automatically controlled by a Fire Alarm system – for example, a door holder device.



Features

- 3 operating modes:
 - Panel controlled
 - Analogue Loop failure
 - Power Supply failure
- 12V or 24V AC or DC supply - from External Supply
- Two sets of voltage-free changeover relay contacts
- 3mm Green LED indicates the relay is energized – the Normal state.
- May be installed in a standard PDL flush or surface-mount box, or with nylon stand-offs

Specification

- 12V or 24V AC/DC operation
- Monitors the Analogue Addressable Loop status
- Relay operation is slugged (nominal 16 to 25 second) to mitigate momentary disconnections.
- 2 sets of changeover relay contacts, rated 5A @ 24Vdc/24Vac
- Current Draw:
 - 1mA from the Analogue Addressable loop
 - 55mA from the 12V/24V Power Supply when the relay is active

Installation:

- Ensure the connections are correctly identified.
- **AA Loop:** connect the Analogue Addressable Loop cables to 'AA Loop' + and – terminals.
- **Supply In:** connect the External PSU (AC or DC) to the 'Supply In' terminals. The input polarity is unimportant.
- **Supply Out:** connect the Analogue Relay (M500R) 'C' contact to 'Supply Out'
- **Operate:** connect the Analogue Relay (M500R) 'NC' contact to either 'Operate 12V' or 'Operate 24V' terminals, depending on whether the External PSU is 12V or 24V (AC or DC).
- **Relay:** connect the Load - the diagram shows a normally-energised Magnetic Door Holder connected to the Common (C) and Normally Open (NO) contacts.
- Verify the wiring is correct before applying power.

Function:

The Failsafe Relay Board relay is activated when all of the following conditions are met:

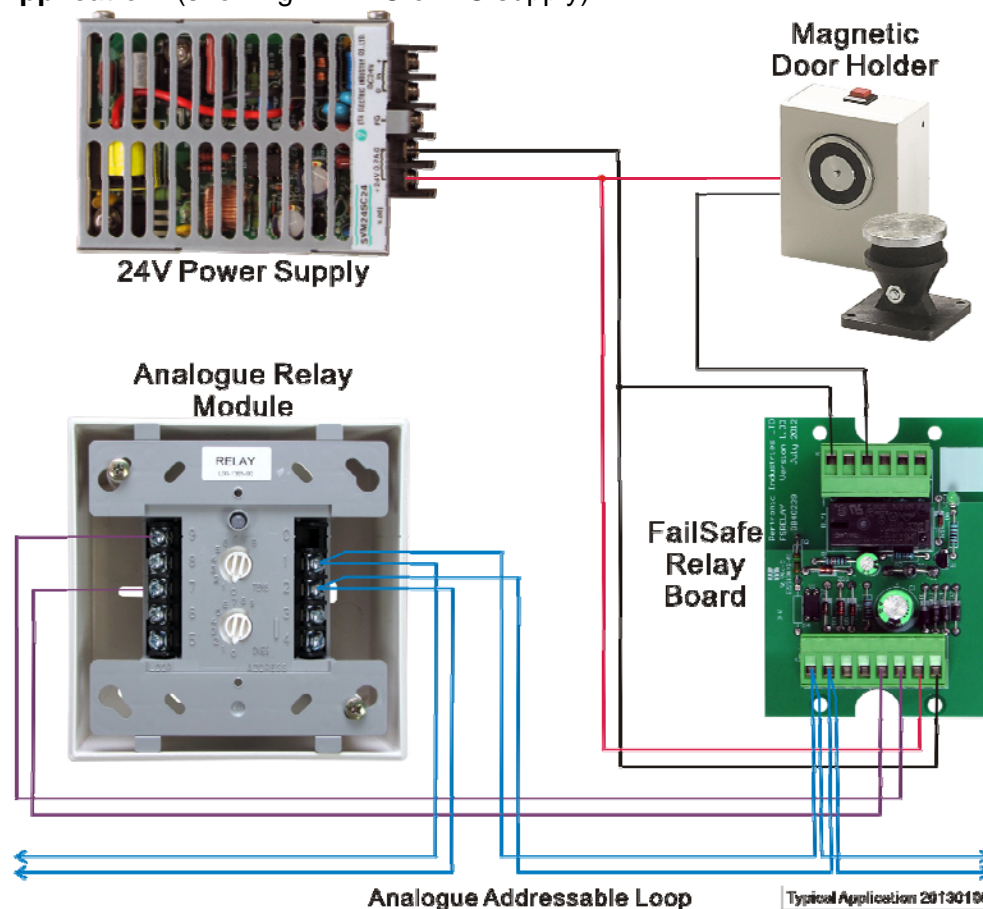
- the Analogue Addressable Loop has power, and
- the External Power Supply has power, and
- the M500R is inactive.

The M500R gives addressable control of the output through mapping in the control panel.

AA Loop Relay	AA Loop	PSU	Status	FailSafe 'C'/'NO'	Load
Normal	OK	OK	Normal	Closed	ON
Active	OK	OK	Active	Open	OFF
Normal	SC or OC	OK	Fault	Open	OFF
Normal	OK	OFF	Fault	Open	OFF

Note: Connection **NC** is the internal 0V reference and is provided for production testing only

Typical Application: (showing 24V AC or DC supply)



Order Code:

NZS Code	Description
FSRELAY	Failsafe Relay Board