

FRM-1 Relay Module

Features

- Built-in type identification automatically identifies these devices to the control unit
- Internal circuitry and relay powered directly by two-wire SLC loop
- Integral LED blinks green each time a communication is received from the control unit and turns on in steady red when activated
- LED blink may be deselected globally (affects all devices)
- High noise immunity (EMF/RFI)
- Wide viewing angle of LED
- SEMS screws with clamping plates for wiring ease
- Face plate is made of off-white Noryl,
- Controls include two rotary switches for direct-dial entry of address (01-159)*
- Two Form-C dry contacts that switch together
- FlashScan® communication protocol

Applications

- The FRM-1 Addressable Relay Module provides the
- ▶ AUTOPULSE® IQ-301, IQ-396X, or IQ-636X with dry-contact outputs for activating a variety of auxiliary devices, such as fans, dampers, control equipment, etc. Addressability allows the dry contact to be activated, either manually or through panel programming, on a select basis.
 - ▶ FlashScan (U.S. Patent 5,539,389) is a communication protocol that greatly enhances the speed of communication between analog intelligent devices. Intelligent devices communicate in a grouped fashion. If one of the devices within the group has new information, the unit CPU stops the group poll and concentrates on single points. The net effect is response speed greater than five times that of other designs.

Description

Each FRM-1 module uses one of 159* possible module addresses on a SLC loop. It responds to regular polls from the control unit and reports its type and status, including the open/normal/short status of its Notification Appliance Circuit (NAC). The LED blinks with each poll received. On command, it activates its internal relay. The FRM-1 can be used to replace the CMX-2 module, Part No. 417479, in existing systems.

Rotary switches set a unique address for each module. The address may be set before or after mounting. The built-in TYPE CODE (not settable) will identify the module to the control unit, so as to differentiate between a module and a sensor address.

The FRM-1 may be programmed to operate dry contacts for door holders, Air Handling Unit shutdown, etc., and to re-set four-wire smoke detector power.

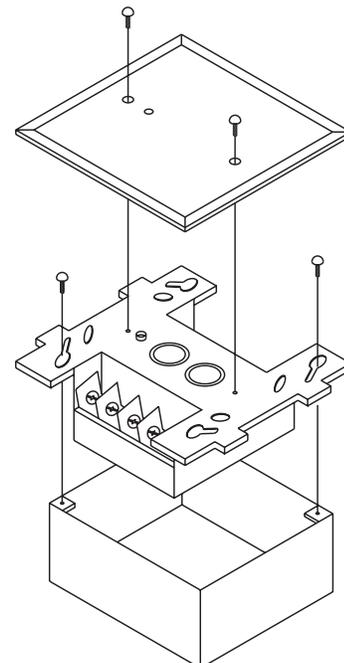
Technical Information

Normal Operating Voltage: 15 to 32 VDC
 Maximum Current Draw: 5.1 mA (LED on)
 Average Operating Current: 270 μ A (LED flashing)
 EOL Resistance: not used
 Temperature Range: 32 °F to 120 °F (0 °C to 49 °C)
 Humidity Range: 10% to 93% non-condensing

RELAY CONTACT RATINGS

Load Description	Application	Maximum Voltage	Current Rating
Resistive	Non-Coded	30 VDC	3.0 A
Resistive	Coded	30 VDC	2.0 A
Resistive	Non-Coded	110 VDC	0.9 A
Resistive	Non-Coded	125 VAC	0.9 A
Inductive (L/R = 5 ms)	Coded	30 VDC	0.5 A
Inductive (L/R = 2 ms)	Coded	30 VDC	1.0 A
Inductive (PF = 0.35)	Non-Coded	125 VAC	0.5 A

MOUNTING THE FRM-1 TO A 4 INCH SQUARE, 2 1/8 INCH DEEP JUNCTION BOX



004752

* 01-99 with AUTOPULSE IQ-301 and IQ-396X

Listings and Approvals*

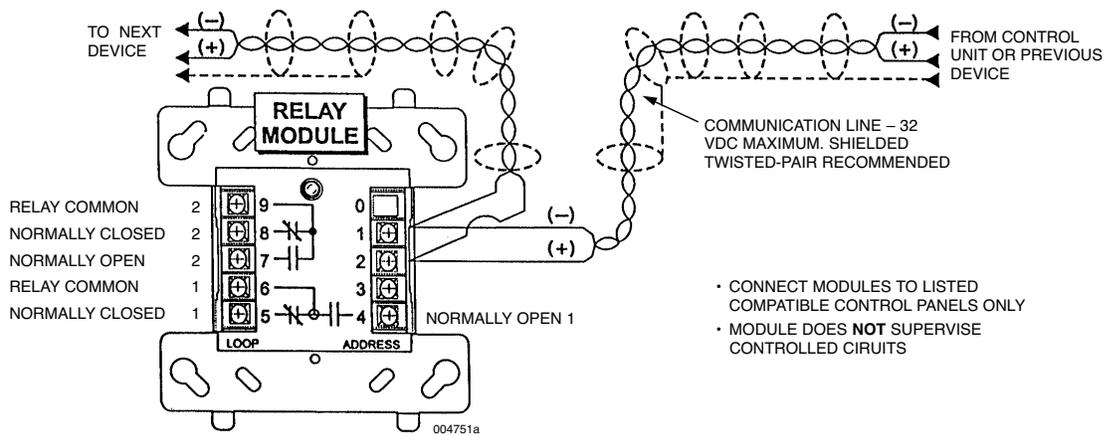
- UL..... S3705
- ULC..... CS669
- ▶ Factory Mutual (FM)..... Approved
- California State Fire Marshal (CSFM)..... 7300-0028:202
- ▶ MEA (NYC)..... 457-99-E
- Maryland State Fire Marshal..... Permit # 2020
- ▶ * Listings and Approvals are under NOTIFIER.

Ordering Information

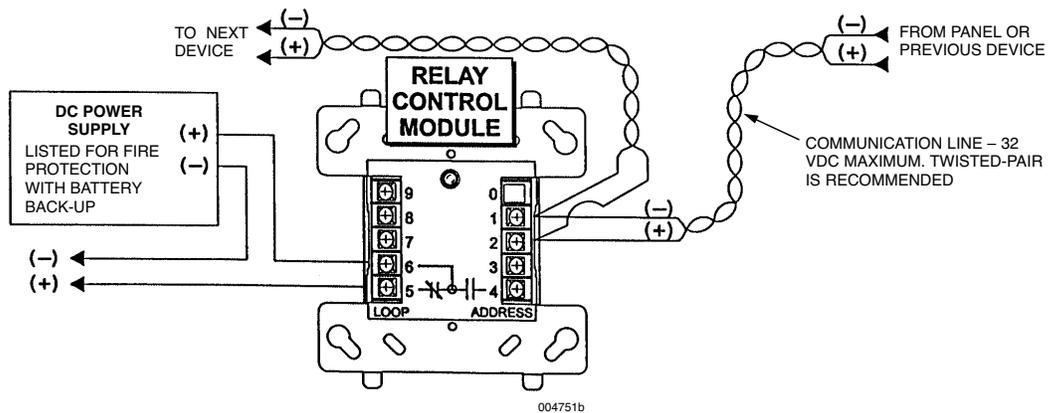
Part No.	Description	Shipping Weight	
		lb.	(kg)
428102	FRM-1 Intelligent Relay Module	1	(0.45)

- ▶ FlashScan is a trademark of Honeywell International.
- Noryl is a registered trademark of GE Plastics, a subsidiary of General Electric Company.
- ANSUL and AUTOPULSE are trademarks of Ansul Incorporated or its affiliates.

WIRING DIAGRAM



RELAY CONTROL MODULE USED TO DISCONNECT A POWER SUPPLY



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