# CRF-300(A)

## Relay Module

**Fire·Lite Alarms**
by Honeywell

## General

The **CRF-300(A)** Addressable Relay Module provides the system with a dry-contact output for activating a variety of auxiliary devices, such as fans, door holders, dampers, control equipment, etc. Addressability allows the dry contact to be activated through panel programming, on a select basis.

LiteSpeed™ is a communication protocol developed by Fire•Lite Engineering 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 panel CPU stops the group poll and concentrates on single points. The net effect is response speed greater than five times that of other designs.

## Features

- Built-in type identification automatically identifies these devices to the control panel.
- Internal circuitry and relay powered directly by two-wire SLC loop.
- Integral LED "blinks" green each time a communication is received from the control panel and turns on in steady red when activated.
- High noise immunity (EMF/RFI).
- Wide viewing angle of LED.
- SEMS screws with clamping plates for wiring ease.
- Direct-dial entry of address: 01– 159 for MS-9600(A) series panels, 01 – 99 on MS-9200UDLS(A) and MS-9050UD(A).

## Applications

The CRF-300(A) may be programmed to operate dry contacts for door holders, Air Handling Unit shutdown, etc., and to reset four-wire smoke detector power.

## Construction

- The face plate is made of off-white heat-resistant plastic.
- Controls include two rotary switches for direct-dial entry of address setting.
- The CRF-300(A) is configured for a single Class B (Style Y) or Class A (Style Z) Notification Appliance Circuit.
- The CRF-300(A) provides two Form-C dry contacts that switch together.

## Operation

Each CRF-300(A) uses one of the addresses on a SLC loop. It responds to regular polls from the control panel 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.

*NOTE: Open/short supervision is suspended with the CRF-300.*

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 panel, so as to differentiate between a control module and a relay module.



**CRF-300(A)**

## Specifications

**Normal operating voltage:** 15 to 32 VDC.

**Maximum SLC current draw:** 6.5 mA (LED on).

**Average operating current:** 230 µA direct poll (CLIP mode), 255 µA group poll (LiteSpeed mode) with 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.

**Dimensions:** 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 mm) deep box.

## 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=5ms) | Coded | 30 VDC | 0.5 A |
| Inductive (L/R=2ms) | Coded | 30 VDC | 1.0 A |
| Inductive (PF=0.35) | Non-Coded | 125 VAC | 0.5 A |

## Agency Listings and Approvals

In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL:** S2424
- **ULC:** S2424
- **FM approved**
- **CSFM:** 7300-0075:185
- **MEA:** 72-01-E

## Product Line Information

**CRF-300(A):** Intelligent addressable relay module.

**:** Intelligent addressable relay module, ULC listed model.

**SMB500:** Optional surface-mount backbox.

*NOTE: For installation instructions, see document I56-1190-005 and refer to the SLC Wiring Manual, document 51309.*