



Series SR-400 Single Hazard Releasing Panel



SR-400

Description

The SAFETECH™ INTERNATIONAL, INC. **SR-400** Single Hazard Releasing Panel provides a reliable system for use with fire suppression and sprinkler pre-action/deluge systems. The SR-400 is a microprocessor-based system with sophisticated software and hardware integrated into a single, reliable package.

Averaging is used on initiating circuits to filter noise spikes and to ensure proper signals. Each analog to digital (A to D) channel monitoring initiating circuits is calibrated during each change in state to ensure proper operation of the associated hardware. Key code building is used during each portion of the program to ensure that the proper software sequence is used prior to activating any output. The release circuits are protected by an intelligent transistor that impedes noise spikes and microprocessor failure from inadvertently activating release outputs (Agent Release and Solenoid).

The SR-400 provides 8 status LEDs (AC Normal, Alarm, Pre-Discharge, Release, Supervisory, Trouble, Alarms Silenced, and Abort) for instant feedback. A diagnostic LED display is provided to help troubleshoot any potential field problems, provide current status, and retain stored event. A Reset and Silence switch is provided to allow control of the system outputs and operation.

The SR-400 can be configured for either one or two conventional detection circuits. The detection circuits can be configured for sequential detection, cross zone, or single detector release.

Depending on the configuration selected, the SR-400 also provides up to three initiating circuits to monitor contact devices (Abort, Manual Release, Waterflow, or Supervisory switches). Four different Abort types are available including a special NYC option. All four initiating circuits can be converted to Class A operation with an optional Class A initiating module (P/N SR-400-A). All initiating circuits are inherently power limited. A ten-position dip switch is used to set all options.

Three notification appliance circuits, rated for 2.0 amps @ 24 VDC, are available. Each circuit, depending on the configuration, will provide distinct signaling for Alarm, Pre-Discharge, Release, Waterflow, or supervisory conditions. A separate Agent Release or Solenoid circuit is provided to operate the suppression system. A dedicated switch is provided for the release outputs. All output circuits, including solenoid and agent release circuits are power limited.

The SR-400 provides dedicated alarm and trouble SPDT contacts for annunciation and control. If additional outputs are required, the SR-400-R4 Relay module can be added.

The panel is available in multiple hardware configurations, depending on the input power source (120 VAC or 208/240 VAC). The system comes with a 2.6 amp @ 24 VDC power source.

Features

- ◆ Suited for multiple types of suppression: Clean Agent, Carbon Dioxide, and Sprinkler Pre-action/Deluge Systems;
- ◆ Microprocessor based with hardware and software integration designed to guarantee reliability;
- ◆ Cross zone, sequential, manual release, abort, waterflow, and supervisory detection types;
- ◆ Three Class B notification appliance circuits rated for 2.0 amps @ 24 VDC;
- ◆ Dedicated release circuits compatible with agent release or solenoid actuation;
- ◆ Four Class B initiating circuits;
- ◆ Optional Class A module for initiating circuits;
- ◆ Alpha-numeric LED display for troubleshooting;
- ◆ Programmable pre-discharge and discharge timers;
- ◆ Resettable and continuous auxiliary output power;
- ◆ Integral 2.6 amp power supply, Expandable to 10.0 amps;
- ◆ Small surface or flush mount enclosure with removable door;
- ◆ Approved for Releasing Device Service and Sprinkler Supervisory.



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The system has been designed to comply with the following standards:

NFPA 12	Carbon Dioxide Extinguishing Systems
NFPA 12A	Halon 1301 Extinguishing Systems
NFPA 13	Installation of Sprinkler Systems
NFPA 15	Water Spray Systems
NFPA 16	Deluge, Foam-water and Foam-spray Systems
NEPA 70	National Electrical Code
NFPA 72	Installation, Maintenance and Use of Protective Signaling Systems
NFPA 2001	Clean Agent Fire Extinguishing Systems

Specifications

AC Power

- ◆ 120 VAC or 208/240 VAC 50/60 Hz
- ◆ Maximum Power consumption 170 VA

DC Power

- ◆ 0.090 Amps consumed by panel
- ◆ 2.6 Amps total supplied by panel for all uses

Auxiliary DC Output

- ◆ 0.5 Amps maximum on pins 6 & 7 total @ 24 VDC

Auxiliary DC Input

- ◆ 8.0 Amps maximum current @ 24 VDC
- ◆ 0.100 VRMS maximum ripple
Use of Aux. In requires a 24 V regulated source, UL listed for fire protective signaling.

Battery Pack Interface

- ◆ 8.0 Amps maximum supply current @ 27V nominal
- ◆ 1.5 Amps maximum charge current @ 27V nominal

Notification/Release Circuits

- ◆ 2.0 Amps maximum on NAC #1, 2, 3, Solen #5
- ◆ 6 ARMs on AgtRel #4

Dry Contact Outputs

- ◆ 2 SPDT relays rated 5 [Amps@30VDC](#) or [5Amps@250VAC](#)
- ◆ SR-400-R4 has 4 DPDT relays rated [5Amps@30VDC](#) or [5Amps@250VAC](#)
Source through relays must be power limited or Class 2

Environmental Conditions

- ◆ Temperature range 32° to 120° F, 0C to 49C
- ◆ Relative humidity 85%

Listings and Approvals

UL Standard 864
California State Fire Marshall
Factory Mutual Research Corp.
New York City MEA

How to Order

SR-400-1	SR Controller, Red cabinet, 120 VAC
SR-400-2	SR Controller, Red cabinet, 208-240 VAC
SR-400-CPU	SR Controller CPU board only
SR-400-A	Class A initiating module
SR-400-R4	Relay module, 4 relay

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