

SFC-102

Two Zone Fire Alarm Control



Description

Summit's SFC-102 is a versatile, power-packed fire alarm control panel designed for small building fire protection. With its exceptional feature set, a power supply that will handle the panel's full rated load and flexible front panel programming for quick and simple configuration to suit the application at hand, the SFC-102 is a powerful, versatile panel, ideally suited for small, fast turnaround fire applications.

The SFC-102 is equipped with two Style B (Class B) initiating circuits, two Style Y (Class B) notification appliance circuits, one Form "C" common alarm relay, one Form "C" common trouble relay, one non-switched Aux. Power output and one switched Aux. Power output. The panel also has individual alarm, supervisory and trouble LED indicators per zone.

The panels feature a 4.2A power supply which provides a full 3.0A of NAC power, 0.5A Aux. power with the balance to run the panel and charge the batteries. No extra transformers or added power supplies are required. In addition the panels has 500mA of Auxiliary power with switched and unswitched outputs.

The SFC-102 is field programmable from the front panel using the front panel LEDs and switches for simple, quick programming. All initiating and indicating circuits as well as system functions are configured from the front panel.

Features

- 2 Style B (Class 'B') dual-use zones
- 2 Style Y (Class 'B') notification appliance circuits
- 4.2A power supply
- 500mA of Aux. power
- Common alarm relay
- Common trouble relay
- Integral battery charger
- 'Secur-Bus' for dialer and remote annunciation
- Event buffer
- Six programmable zone options
- Class A capability, both NAC and Zones
- One-man walk test
- Programmable NAC silence timer
- 3 LEDs per zone
- Front panel programming

Optional Modules

- Dual line dialer module
- City tie/polarity reversal module
- Relay module
- Style D (Class A) zone module
- Remote 5 zone LED annunciator
- Flush trim ring

Each initiating circuit can be individually configured as Null (zone not used), Instant (smokes, contacts instant), Verify (smokes verified, contacts instant), Waterflow, Supervisory or 4-Wire Verify.

An optional Style D (Class A) converter module converts both Style B (Class B) initiating circuits to Style D (Class A).

Each NAC zone is power limited and provides 1.5A at 24VDC full wave rectified for heavy duty signal loads. The NAC circuits can be configured for Steady, Temporal or Strobe. The notification circuits are jumper selectable to be configured as one Style Z (Class A) zone.

The SFC-102 utilizes "Secur-Bus" which is a 4 wire port for communication and power to accessory components. All Secur-Bus components are supervised. Secur-Bus components include the Dual line dialer modules and the remote LED annunciators.



S24005 7165-1665:104

Engineering Specifications

The contractor shall supply a 2 zone, fully supervised fire alarm control panel. The panel shall supervise and monitor both 2-wire smoke detectors and contact alarm initiating devices on each two-wire zone.

The control panel shall be complete with two Style B (Class 'B') alarm initiating zones, two Style Y (Class 'B') notification appliance circuits, one Form 'C' common alarm relay, one Form 'C' common trouble relay, one non-switched Aux. power output, and one switched Aux. power output. The panel shall include individual alarm, supervisory and trouble LED indicators per zone.

Each alarm initiating zone shall be capable of being individually programmed for smoke/contact instant alarm, smoke auto-verify and contact instant, supervisory, water flow or four-wire smoke auto-verify service. Each alarm initiating zone shall limit the maximum current to 60mA and be supervised for opens and ground faults. An optional module that mounts inside the cabinet shall be available to convert the two alarm initiating zones to Style D (Class 'A').

Each notification appliance circuit shall be supervised for opens, shorts and ground faults. Each notification appliance circuit shall be capable of being individually programmed as steady or temporal (ANSI cadence). Each notification appliance circuit shall supply 24VDC full wave rectified at 1.5A and be power limited. NAC's shall be capable of being jumper programmed to operate as a single Style Z (Class 'A') NAC. NAC #2 shall also be capable of being programmed as strobe whereby the NAC will only silence after the panel is reset.

The total Aux. power shall be 24VDC, 500mA max. and be power limited. The control panel power supply shall support the Aux. power (0.5A), the two NAC's (3.0A), the battery charger (0.35A) and the control panel without the addition of any other power supplies or components.

The control panel shall include a four-wire output which shall provide power and communication for up to four remote trouble indicators and up to four remote alarm annunciator/trouble indicators. Each remote shall be supervised for its presence.

The panel shall accommodate, within the cabinet, an optional three (3) relay module. Each relay shall be Form C and be individually selectable for alarm, supervisory or trouble operation. Relay contacts will be rated at 2A @ 30 VDC.

The control panel shall accommodate, within the cabinet, an optional local energy city-tie/polarity reversal combination module or an optional dual-line digital dialer capable of transmitting all alarms/troubles in either SIA, Contact ID, 10/20 BPS or pager format.

The control panel shall include individual trouble indicators for NAC 1, NAC 2, battery, ground, signals silenced, common alarm, common trouble and AC on. The control panel shall also include controls for trouble silence, signal silence, system reset and lamp test. The switch to put the panel into the programming mode or walk test mode shall only be accessible by a qualified installer. Indicators shall always be visible and the user controls shall only be accessible once the locked cabinet door is opened. Access to batteries and system components shall be user restricted by complete dead-front construction.

The panel shall include programmable options for a 60 sec. silence inhibit period, water flow silence inhibit, automatic NAC silence and silent/audible one man walk test. All panel programming shall be done using the front panel controls and indicators. Program data shall be stored in non-volatile memory that retains the information when all power is removed from the panel. The panel shall also include an event buffer that is installer accessible so that the last 20 events can be reviewed.

Technical Data

AC Power	120V 60Hz 1.5A, 240V 50Hz
NAC 1	24 VDC full-wave rectified, 1.5A max., PTC overload protected, power limited, Style Y, (Class 'B')
NAC 2	24 VDC full-wave rectified, 1.5A max., PTC overload protected, power limited, Style Y (Class 'B')
NAC 1/2 as Style Z (Class A)	24 VDC full-wave rectified, 1.5A max., PTC overload protected, power limited
Zones	24 VDC filtered regulated, 60mA alarm current max., power limited, 100 ohms max. line resistance
DAT/CLK	Data and clock line for remote module communications. (Secur-Bus)
Aux+	24 VDC filtered regulated, 500mA max., PTC overload protected, power limited

COM	Non-switched return for AUX+ power, 500mA
SCOM	Switched return for AUX+ power, 500mA
<i>Note: The 500mA from AUX+ is shared between the COM and SCOM returns. Internal and remote module power is supplied from the AUX+ and COM supply.</i>	
Alarm relay contacts	30 VDC, 2A max.
Trouble relay contacts	30 VDC, 2A max.
Battery charger	24 VDC, 350mA max. Will charge up to 16AH* sealed lead-acid batteries max.
Cabinet	14 1/2" W x 15" H x 4 1/4" D - Black

*External cabinet required for batteries larger than 12AH.

Ordering Information

Model	Description
SFC-102R	Two Zone Fire Alarm Control Panel, Red
Accessories	
SICA-102	Two Zone Style D (Class A) Module
SRM-103	Three Programmable Form "C" Relays, 2A@30VDC
SPR-100	Local Energy & Polarity Reversal Module
SUDACT-100	Dual Line Digital Dialer
SCFG-100	Handheld Programmer for SUDACT-100
SRTI-100	Remote Trouble Indicator
SRAM-105	Five Zone Remote Annunciator
SFC-100TRB	Semi-Flush Trim Ring, Black