

FireShield Plus

Conventional Fire Alarm Control Panels



Overview

The FireShield Plus fire alarm family consists of 3, 5 and 10 zone conventional fire alarm control panels, an integrated DACT/Dialer, serial annunciator modules, and serial remote relay modules. All of these components are microprocessor-controlled. The FireShield Plus family is ideal for both new and retrofit installations alike.

FireShield Plus incorporates features designed to simplify installation, operation and maintenance. These include front panel programming, one person walk testing, and selectable IDC and NAC types. In addition, when used with Edwards *CleanMe*[®]-compatible smoke detectors, FireShield Plus provides analog type features such as remote maintenance alert and automatic drift compensation that reduces false alarms and simplifies maintenance calls.

FSP502 and FSP1004 panels support Class A operation by combining pairs of on-board initiating circuits (IDCs) or notification circuits (NACs) to provide the necessary Class A circuits. For example, the FSP1004 comes factory set to support 10 Class B IDCs and four NACs. But it can be field-configured to provide five Class A IDCs, no Class B IDCs, and two Class A NACs – or any other combination of circuits that fall within the circuit-pairing parameters.

	FSP1004	FSP502	FSP302
Class B IDCs	Up to 10	Up to 5	3
Class A IDCs	Up to 5	Up to 2	Not supported
Class B NACs	Up to 4	Up to 2	2
Class A NACs	Up to 2	1	Not supported
NAC Power	3.5 amps*	3.5 amps	3.5 amps
Auxiliary power	0.5 amps	0.5 amps	0.5amps

Note: Class A operation will reduce the number of available Class B IDCs and/or NACs, depending on the panel configuration. See Specifications on page 5 for details.

*Expandable to 7.0 amps

Standard Features

- Available in 3, 5, and 10 IDC models
- IDC or NAC pairs convertible to single Class A circuits (10 and 5 IDC panels only)
- *CleanMe*[®] provides remote annunciation if a detector drifts out of UL/ULC limits reducing the chance of a false alarm
- Combination Waterflow and Supervisory IDCs reduces wire and zone counts
- NACs programmable by zone and individually selectable for Genesis, continuous, temporal outputs, or coded
- Front panel programmable simplifies installation and servicing
- Optional fully integrated DACT/Dialer for PC programming
- Genesis option allows precision synchronization and audible silence over two wires without additional modules
- On-board relays for Alarm, Supervisory and Trouble
- Optional serial bus relay modules are programmable for common or zone activation
- Optional serial bus remote annunciator family
- One person walk-test (audible or silent)
- Expandable power supply on 10 IDC panel reduces booster power costs
- Trim ring available for semi-flush mounting
- Supports 2M, "EC", 6200, 400, 500 and 700 series detectors

Application

FireShield Plus provides smoke and fire detection, occupant notification and off-premises signaling for small- to medium-sized buildings.

Each IDC can be configured for either Class B or Class A operation and one of eight operating modes:

- Alarm –with or without smoke detector verification including discrimination of contact devices
- Waterflow Alarm;
- Waterflow Alarm/Supervisory (Combination IDC);
- Supervisory (Latching/non-latching);
- Monitor (non alarm or supervisory)
- Signal Silence
- Drill
- Cross zoning

NACs may also be configured for either Class B or Class A operation. Additionally, NACs can be individually configured for one of six outputs. These are Genesis, Genesis (A/V silenceable), Continuous, Temporal, Coded, and City Tie. The Genesis selection allows independent horn control over two wires and provides precision synchronization for Genesis devices, all without the need for a Genesis Signal Master accessory.

When configured for Genesis notification appliances, FireShield Plus's Alarm Silence function will silence connected Genesis audible appliances but Genesis strobes will remain active until the panel is reset. When Genesis Mode is selected, both the horns and strobes on Genesis and Enhanced Integrity notification appliances will be synchronized across all NACs.

Note: zones may be selected for either latching or non-latching operation.

Detectors with intelligent features at a conventional price

When combined with Edwards *CleanMe*®-compatible smoke detectors, FireShield Plus provides intelligent features at a conventional price. If a *CleanMe*® detector drifts out of the UL/ULC sensitivity range, EST's patented remote maintenance reporting sends an alert to the FireShield Plus control panel. This feature reduces the chance of a false alarm and simplifies service calls. In addition, *CleanMe*®-compatible smoke detectors have built-in drift compensation that extends the time between cleanings. If cleaning is ever necessary, it is literally a snap with EST's exclusive replaceable optical chamber.



Panel LED Display

The following system LEDs display the panel's status:

- *Alarm* – panel is in the alarm state;
- *Trouble* – panel is in the trouble state;
- *Supervisory* – panel is in the supervisory state;
- *Power* – indicates the status of the AC power source;
- *Disable* – indicates when any IDC, NAC, relay or the DACT is disabled;
- *Annunciator Trouble* – indicates trouble on the remote annunciator bus;
- *Battery Trouble* – indicates battery or charging problems;
- *Ground Fault* – indicates a short between any panel circuit and ground;
- *Walk Test* – indicates that one or more IDCs are in the walk test mode;
- *Alarms Silenced* – indicates that the panel is in the alarm state with one or more NACs silenced.
- *Waterflow* – indicates that one or more circuits have detected an active waterflow switch.
- *Service Detector* – indicates the presence of a dirty detector.
- *Remote Disconnect* – indicates off site communication has been disabled.

Each IDC has a disable switch and three LEDs:

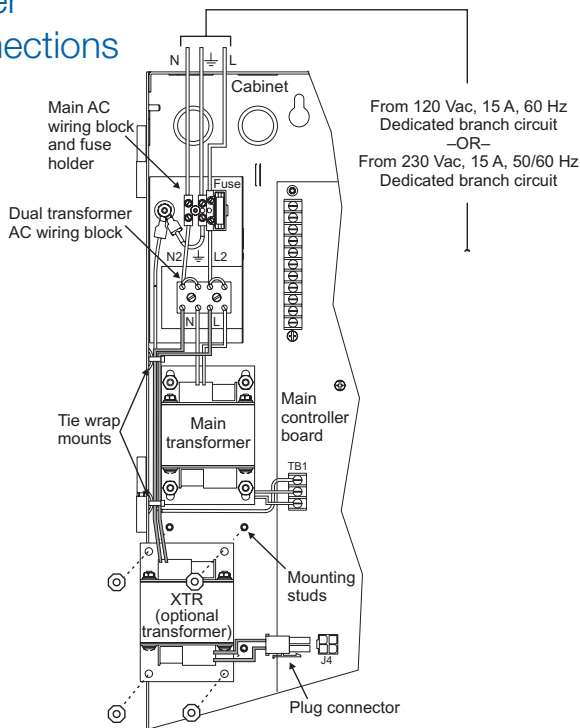
- Alarm – *red* – indicates that the IDC is in the alarm state;
- Trouble – *yellow* – indicates that the IDC is in the trouble state or is disabled (when flashing);
- Supervisory/Monitor – *yellow* – indicates that the IDC is in the supervisory state or the monitor state (when flashing).

Each NAC also has a disable switch and a trouble/disable LED.

Status indication with the DACT/Dialer installed

The dialer's LCD display provides two lines x 16 characters of text. For programming, the top line displays the programming step and the lower line displays the selected option. All system events are displayed on the LCD with custom zone messages. During normal operation, the LCD will display any off-normal condition present in the panel.

Power Connections



DACT/Dialer



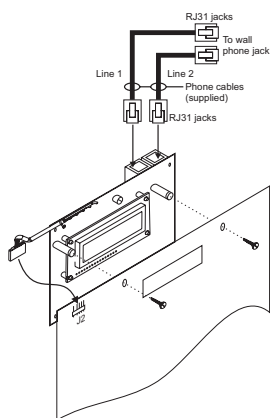
The DACT/Dialer installs behind the front panel display.

The optional DACT/Dialer is a multi-function module that provides communications, modem capability, and LCD display functions. Its primary function is as a Digital Alarm Communicator Transmitter (DACT). As a DACT, it transmits event messages to a Digital Alarm Communicator Receiver (DACR) at a monitoring facility. The monitoring facility then notifies the fire department and other responsible parties of the event. Programmable options include single or dual line operation, and split or dual reporting to two DACRs.

The DACT module can also be used as a modem to connect the panel to both local and remote computers for uploading and downloading of configuration data (programming), panel status and event history. For security, the modem can be configured to accept programming on incoming calls or it can be required to call a preprogrammed number before accepting downloads and sending uploads.

The DACT module can be configured to work as all of the above, or as only an LCD display or LCD display and modem.

Note: All panel versions are available with factory installed DACT. See order table for ordering information.



Options

Off-premise communication

A fully integrated FireShield Plus DACT/dialer is available for reporting events to a monitoring facility. The DACT also supports uploading or downloading of system configuration, status and event history. The DACT is programmable for either single or dual line operation. It also supports split and dual reporting for two digital alarm receivers.

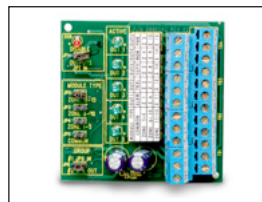
The DACT brings additional features to the panel including a 32-character alphanumeric LCD display, local or remote PC programming and an event history log.

Remote Annunciators and Relays

The serial bus standard on all FireShield Plus models is another installation time-saver. This circuit allows the connection of Remote System Indicators (FSRSI), Remote Zone Indicators (FSRZI-A, FSRZI-SA) and Remote Relay Modules (FSRRM24) over a four-wire (data and power) circuit. Annunciator and relay modules can be installed up to 1,000 feet from the panel on 18-gauge wire.

Modules are also available for City Tie (CTM) and Reverse Polarity (RPM) connections.

Remote Relay Module



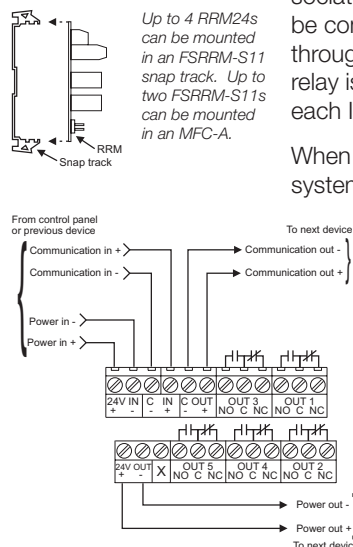
The Remote Relay Module mounts on a plastic track inside an MFC-A cabinet.

The Remote Relay Module (FSRRM24) is one component of the system that sets FireShield Plus apart from other panels in its class. This module has five Form C relays rated at 1 amp each. It can be configured to function in either a zone relay mode or a common system mode.

When configured in the zone relay mode, relays energize when the associated IDC is active. The module can be configured for activation by IDCs 1 through 5 or IDCs 6 through 10. One relay is automatically associated with each IDC.

When configured in the common system mode, relays energize or de-energize when the panel changes state. One relay is available for each of the following functions: Alarm, Supervisory, Trouble, Power Loss, Monitor.

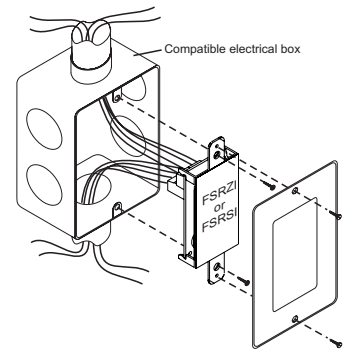
The FSRRM24 mounts on a plastic snap track and can be installed in an MFC-A or other listed fire alarm enclosure. The panel will support two RRM's of each configuration for a total of six on the 10-zone panel.



Remote Annunciators



The FireShield Plus family has several remote annunciation options. The serial remote annunciator bus can be run up to 1000 feet (305 m) on untwisted non-shielded 18-gauge cable. Serial annunciator models round out the family to provide a range of features and functions. As many as three annunciator modules may be mounted in a standard electrical box, sharing an attractive trim plate that blends with any decor.

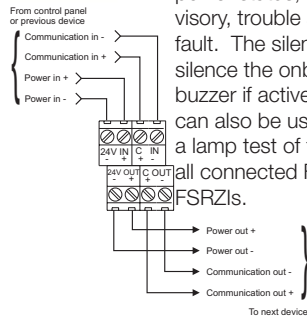


The FSRSI can be installed alone or with one or more FSRZIs. The FSRSI and FSRZI-A require trim plates (ordered separately). These are available in one, two or three gang models. Each panel will support two FSRZIs.



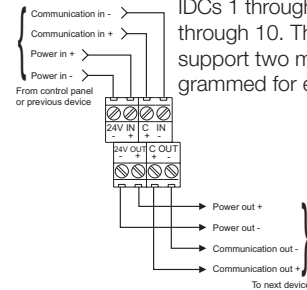
Remote System Indicator (FSRSI)

The FSRSI is ideal for common system annunciation. It includes five LEDs and a local silence/lamp test switch. The LEDs indicate power status, alarm, supervisory, trouble and ground fault. The silence switch will silence the onboard trouble buzzer if active. The switch can also be used to initiate a lamp test of the LEDs on all connected FSRSIs and FSRZIs.



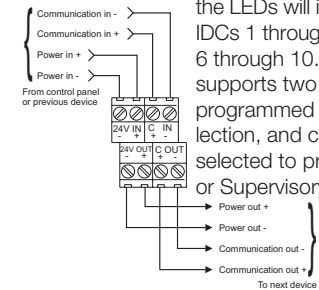
Remote Zone Indicator (FSRZI-A)

The FSRZI-A is used to indicate zones in the alarm state. It contains five red LEDs. Depending on the jumper setting selected, the LEDs will indicate either IDCs 1 through 5 or IDCs 6 through 10. The panel can support two modules programmed for each selection.



Remote Zone Indicator (FSRZI-SA)

The FSRZI-SA is used to indicate zones in the alarm or supervisory state. It contains five bi-color LEDs. Depending on the jumper setting selected, the LEDs will indicate either IDCs 1 through 5 or IDCs 6 through 10. The panel supports two modules programmed for each selection, and can be jumper selected to provide Alarm or Supervisory indications.



FSRA10, FSRA10C

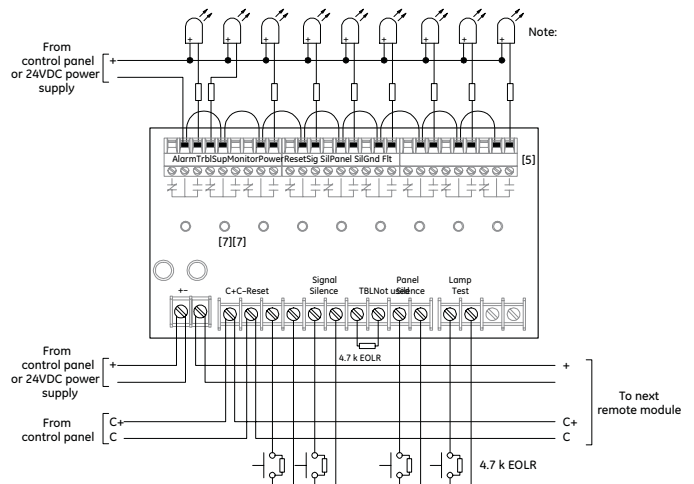
Remote LED annunciators

The FSRA10 is a remote annunciator with capacity for up to ten zones. It includes ten bi-color LEDs (red/yellow) for indicating active zones, and ten yellow LEDs for indicating zone troubles. The (C) option adds common control switches. Both versions mount to standard North American 4-inch square electrical boxes. A surface box is also available.

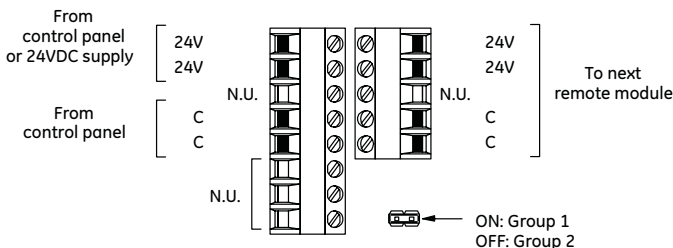


FSUIM Graphic Driver/Interface

The FSUIM is a universal interface module that can be used by FireShield to drive graphic annunciators. It also allows FireShield control panels to control, or be controlled by, other control panels. The FSUIM provides five supervised switch inputs and nine dry contact relay outputs. Nine LEDs provide visual confirmation when each relay is energized. The FSUIM is shipped with a plastic snap track for mounting in an MFC-A cabinet or other listed fire alarm enclosure.



FSRA10, FSRA10C Wiring



Remote Annunciator Specifications

Remote Annunciators	FSRSI Remote System Indicator	FSRZI-A/FSRZI-SA Remote Zone Indicator
Maximum per System	All panels: 2	10 zone panel: 4 3 or 5 zone panel: 2
Current Requirements	Standby: 17 mA Alarm: 56 mA	Standby: 8 mA Alarm: 76 mA
Voltage Range	Minimum: 18.8 Vdc; Maximum: 27.3 Vdc	
Maximum Circuit Capacitance	0.03 µF	
Maximum Circuit Resistance	13 Ohms	
Wire Size	18 - 12 AWG (0.75 mm ² - 2.5 mm ²)	
Mounting	ANSI/NEMA OS1-1996 1-3 gang electrical box	
Operating Environment	Temperature: 32 - 120° F (0 - 49° C); Humidity: 93% RH, non-condensing	

Remote Relay Module – FSRRM24	Configured for Zone Mode	Configured for Common Mode
Maximum per system	10 zone panel: 4; 3 or 5 zone panel: 2	All panels: 2
Current Requirements	Standby: 10 mA; Alarm: 70 mA	Standby: 26 mA; Alarm: 70 mA
Voltage Range	Minimum: 18.8 Vdc; Maximum: 27.3 Vdc	
Contact Rating	1 A @ 30 Vdc	
Maximum Circuit Capacitance	0.03 µF	
Maximum Circuit Resistance	13 Ohms	
Wire Size	18 - 12 AWG (0.75 mm ² - 2.5 mm ²)	
Mounting	Single FSRRM24 mounts in plastic track (included) or up to four FSRRM24s in an FSRRM-S11 11" track ordered separately. FSRRM24s should be installed in an MFC-A or other listed fire alarm enclosure.	
Operating Environment	Temperature: 32 - 120° F (0 - 49° C); Humidity: 93% RH, non-condensing	
Dimensions	2-3/4" W x 3-3/8" H x 1-1/2" D (65.9 mm W x 85.7 mm H x 38.1 mm D)	

F-Series Remote Annunciators	FSRA10	FSRA10C
Common Controls	No	Yes
Dimensions	5-5/8" x 8½" x 1 ½" in (14.3 cm x 21.4 cm x 3.8 cm)	
Mounting	North American 4-inch square electrical box or listed enclosure	
Power Wiring	18 to 12 AWG (0.75 to 2.50 sq mm)	
Data Wiring	18 to 12 AWG (0.75 to 2.50 sq mm) twisted pair (6 twists per foot minimum)	
Operating voltage	18.8 to 27.3 Vdc Supply must be UL/ULC listed for fire protective signaling systems. Do not use FACP accessory power outputs that are interrupted when the panel is reset.	
Standby current	17 mA	
Alarm current	98 mA	
Operating environment	Temperature: 32 to 120 °F (0 to 49 °C); Humidity: 0 to 93% RH, noncondensing at 90 °F (32 °C)	

FSUIM Universal Input Module	
Mounting	MFC-A cabinet or listed fire alarm enclosure
Wire size	12 to 18 AWG (0.75 to 2.5 sq mm)
Operating voltage	21.2 to 27.3 Vdc
Circuit capacitance	0.03 µF, max.
Circuit resistance	13 ohms, max.
Switch inputs	Quantity: 5 End-of-line resistor: 4.7 k ohms ½ W
Relay outputs	Quantity: 9 Type: Common Style: Form C
Contact rating	30 Vdc at 1 A (resistive load)
Standby Current	53 mA
Alarm Current	114 mA
Operating environment	Temperature: 0 to 49 °C (32 to 120 °F); Humidity: 0 to 93% RH, noncondensing at 32 °C (90 °F)

Control Panel Specifications

Control Panels		FSP1004						FSP502			FSP302
Initiating Device Circuits – IDCs (Available combinations shown at right)	Class B	10	8	6	4	2	0	5	3	1	Three Class B IDCs
	Class A	0	1	2	3	4	5	0	1	2	
Notification Appliance Circuits – NACs (Available combinations shown at right)	Class B	4	2	2		0		2	0		Two Class B NACs
	Class A	0	1	1		2		0	1		
Power Supply		4.25 amps expandable to 7.5 amps						4.25 amps total			4.25 amps total
NAC Voltage Rating		24 V _{fwr}									
Maximum NAC current		2.0 amps each, 3.5 amps total 7.0 amps w/ optional transformer						2.0 amps each 3.5 amps total			2.0 amps each 3.5 amps total
AC Input	120 Vac 60 Hz...	2.2 amps w/ optional transformer						1.25 amps			1.2 amps
	230 Vac 50/60Hz...	1.1 amps w/ optional transformer						0.6 amps			0.6 amps
Base Panel Current Draw	Standby...	128 mA 242 mA						104 mA 224 mA			96 mA 180 mA
Alarm...											
Panel Battery Charge Capacity (sealed lead acid only)		Up to two 24 Ah batteries, 18 Ah in cabinet						Up to 24 Ah, 10 Ah max in cabinet *			
Auxiliary Current		0.5 amps max. May be programmed as resettable.									
Auxiliary Output		24 Vdc regulated									
IDC Alarm Current		3.0 mA (Consult detector compatibility list p/n 3100468 for maximum detectors per circuit)									
IDC Circuit		Maximum loop resistance: 13 Ohms; Maximum loop capacitance: 0.03 µF									
IDC Operating Voltage		16.9 to 29 Vdc									
UL Detector ID		100									
Alarm Contact (normally open Form C)		30 Vdc @ 1 A (resistive load)									
Trouble Contact (Form C)		30 Vdc @ 1 A (resistive load)									
Supervisory Contact (normally open Form C)		30 Vdc @ 1 A (resistive load)									
Operating Environment		Temperature: 32 - 120° F (0 - 49° C); Humidity: 5 - 93% RH, non-condensing									
Terminals (wire gauge)		18 - 12 AWG (0.75 mm² - 2.5 mm²)									
Asynchronous Serial Communications		Maximum resistance: 13 Ohms; Maximum capacitance: 0.03 µF									

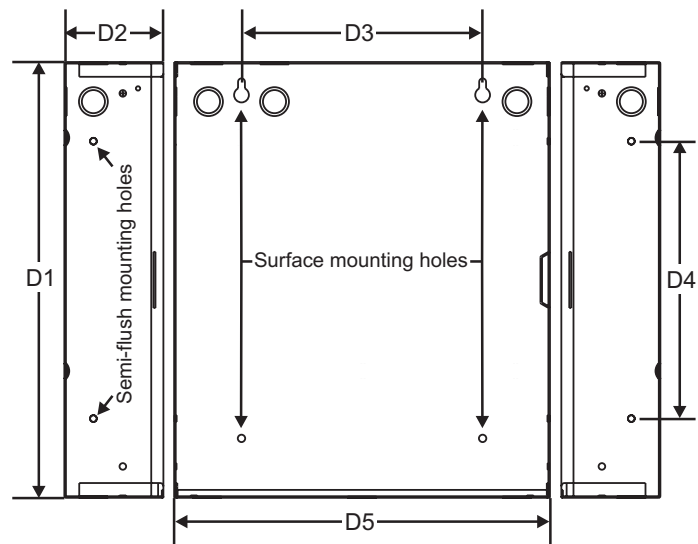
* If larger batteries are required, use an external battery cabinet.

DACT – F-DACT (mounts in panel)	
Receivers	Supports two receivers with two phone numbers each
Communications Protocol	Contact ID (SIA DC-05), 4/2 (SIA DC-02 P3)
Programming	Front panel controls or PC with appropriate software
Telephone line connection	Two RJ31X (plug-to-plug) cords supplied with DACT
Telephone lines	Two or one loop start lines on the public switched telephone network. Pulse or DTMF.
Telephone wall connector	RJ31X/CA31X equiv. or RJ38X/CA38X equiv.
Communications Compliance	Industry Canada CS-03; FCC/CFR 47 Parts 15 & 68; NFPA 72; UL 864; ULC S527
Operating Environment	Temperature: 32-120° F (0-49° C); Humidity: 93% RH, non-condensing
Current requirements	Standby: 65 mA; Alarm: 107 mA

Dimensions

Model	D1*	D2	D3	D4	D5*
Three- & five- zone	19.5 in (49.5 cm)	3.75 in (9.5 cm)	9.13 in (23.2 cm)	10.5 in (26.67 cm)	14.23 in (36.14 cm)
Ten-zone	30 in (76.2 cm)	3.75 in (9.5 cm)	7.75 in (19.7 cm)	21.27 in (54.0 cm)	16.25 in (41.27 cm)

*Add 1½ inches (3.81 cm) to D1 and D5 dimensions for trim kit.



Ordering Information

Part Number	Description	Ship Wt. lb. (kg.)
Control Panels		
FSP1004*	Conventional Fire Alarm Control Panel – 10 Class B IDCs and 4 Class B NACs (Pairs of IDCs and NACs convertible to single Class A circuits), 120 Vac	30.5 (13.8)
FSP1004-2	Conventional Fire Alarm Control Panel – 10 Class B IDCs and 4 Class B NACs (Pairs of IDCs and NACs convertible to single Class A circuits), 230 Vac. Grey cabinet.	30.5 (13.8)
FSP502*	Conventional Fire Alarm Control Panel – 5 Class B IDCs and 2 Class B NACs (Pairs of IDCs and NACs convertible to single Class A circuits), 120 Vac	18.5 (8.4)
FSP502-2	Conventional Fire Alarm Control Panel – 5 Class B IDCs and 2 Class B NACs (Pairs of IDCs and NACs convertible to single Class A circuits), 230 Vac. Grey cabinet.	18.5 (8.4)
FSP302*	Conventional Fire Alarm Control Panel – 3 Class B IDCs and 2 Class B NACs, 120 Vac	18.0 (8.2)
FSP302*-2	Conventional Fire Alarm Control Panel – 3 Class B IDCs and 2 Class B NACs, 230 Vac	18.0 (8.2)
F-TRIM35*	Semi-flush trim ring for FSP302 and FSP502	1.7 (0.8)
F-TRIM10*	Semi-flush trim ring for FSP1004	2.2 (1.0)
* Insert "G" for Gray cabinet or "R" for Red cabinet. Insert "F" for French language (grey cabinets, not available on 220v versions). Insert "GD" or "RD" for red and gray cabinets with dialer installed.		
Related Items		
F-XTR120	Expander Transformer, 120 Vac - For FSP1004* only	4.0 (1.8)
F-XTR230	Expander Transformer, 230 Vac - For FSP1004*-2 only	4.0 (1.8)
EOL3.6-1.1	Required UL listed End of Line Resistors – One 3.6K Ohm and one 1.1K Ohm. One required for each IDC configured as combination waterflow and supervisory.	0.1 (0.5)
EOL-P1	Required ULC listed End of Line Resistor Plate - includes one 1.1K, 3.6K and 4.7K Ohm resistor	1.0 (0.5)
Off Premises Communications		
F-DACT	Digital Communicator/Modem/LCD module (Mounts in control panel)	1.0 (0.5)
RPM	Reverse Polarity Module	3.0 (1.36)
CTM	City Tie Module (Requires 4" square or 2-gang North American electrical box)	1.0 (0.5)
Remote Annunciation		
FSRSI	Remote System Indicator – Includes LEDs for display of Power, Alarm, Supervisory, Trouble and Ground Fault, trouble sounder and silence/lamp test switch. Single gang trim plate included, multi-gang plates ordered separately. Mounts in a single or multi-gang North American electrical box.	0.3 (0.1)
FSRZI-A	Remote Zone Indicator – Includes red LEDs for five IDCs. Single gang trim plate included, multi-gang plates ordered separately. Mounts in single or multi-gang North American electrical box.	0.3 (0.1)
FSRZI-SA	Remote Zone Indicator – Includes LEDs for five IDCs. Single gang trim plate included, multi-gang plates ordered separately. Mounts in single or multi-gang North American electrical box. Jumper selected Alarm (red) or Supervisory (amber) indications.	0.3 (0.1)
FSAT1	Annunciator Trim Plate, 1 gang	0.1 (0.05)
FSAT2	Annunciator Trim Plate, 2 gang	0.1 (0.05)
FSAT3	Annunciator Trim Plate, 3 gang	0.1 (0.05)
FSAT4	Annunciator Trim Plate, 4 gang	0.1 (0.05)
FSRA10	Single Unit 10 zone remote annunciator for FSP1004 – Insert "F" after p/n for French language option	
FSRA10C	Single Unit 10 zone remote annunciator for FSP1004 (with common controls) – Insert "F" after p/n for French language option	
FSUIM	Common Function Graphic Driver/Interface - 9 relays and 5 switch inputs for common system indicators and controls	
Remote Relay Module		
FSRRM24	Remote Relay Module – Five Form C relays. Configurable for IDCs 1-5, or 6-10, or common system indications. Requires MFC-A or other listed fire alarm enclosure.	0.4 (0.2)
FSRRM-S11	11" Mounting track. Holds up to 4 FSRRM24s.	0.4 (0.2)
Accessories		
MFC-A	Multi-function Cabinet (fire alarm accessory enclosure)	7.0 (3.2)
Batteries		
12V4A	4.5 Ah Sealed Lead Acid Battery - 12 Vdc (2 required)	5 (2.27)
12V6A5	7.2 Ah Sealed Lead Acid Battery - 12 Vdc (2 required)	6 (2.72)
12V10A	11 Ah Sealed Lead Acid Battery - 12 Vdc (2 required)	10 (4.45)
12V17A	18 Ah Sealed Lead Acid Battery - 12 Vdc (2 required)	13 (5.90)
12V24A	26 Ah Sealed Lead Acid Battery - 12 Vdc (2 required)	20 (9.07)



Detection & alarm since 1872

U.S.

T 888-378-2329

F 866-503-3996

Canada

Chubb-Edwards

T 519 376 2430

F 519 376 7258

Southeast Asia

T : +65 6391 9300

F : +65 6391 9306

India

T : +91 80 4344 2000

F : +91 80 4344 2050

Australia

T +61 3 9239 1200

F +61 3 9239 1299

Europe

T +32 2 725 11 20

F +32 2 721 86 13

Latin America

T 305 593 4301

F 305 593 4300

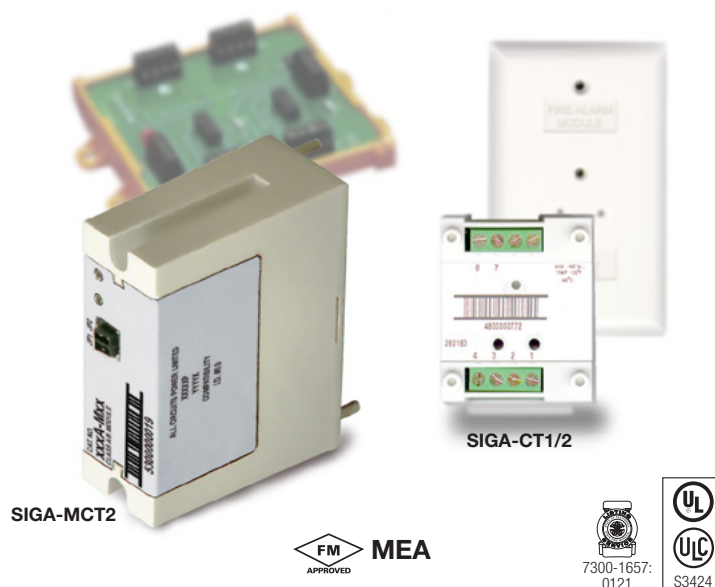
utcfireandsecurity.com

© 2010 UTC Fire & Security.

All rights reserved.

Input Modules

SIGA-CT1, SIGA-CT1HT,
SIGA-CT2, SIGA-MCT2



Overview

The SIGA-CT1 Single Input Module, SIGA-CT1HT High Temperature Single Input Module and SIGA-CT2/SIGA-MCT2 Dual Input Modules are intelligent analog addressable devices used to connect one or two Class B normally-open Alarm, Supervisory, or Monitor type dry contact Initiating Device Circuits (IDC).

The actual function of these modules is determined by the “personality code” selected by the installer. This code is downloaded to the module from the Signature loop controller during system configuration.

The input modules gather analog information from the initiating devices connected to them and convert it into digital signals. The module’s on-board microprocessor analyzes the signal and decides whether or not to input an alarm.

The SIGA-CT1, SIGA-CT1HT and SIGA-CT2 mount to standard North American 1-gang electrical boxes, making them ideal for locations where only one module is required. Separate I/O and data loop connections are made to each module.

The SIGA-CT1HT module operates at an expanded temperature range of 32 °F to 158 °F (0 °C to 70 °C) for those applications requiring more extreme environmental temperature variation.

The SIGA-MCT2 is part of the UIO family of plug-in Signature Series modules. It functions identically to the SIGA-CT2, but takes advantage of the modular flexibility and easy installation that characterizes all UIO modules. Two- and six-module UIO motherboards are available. All wiring connections are made to terminal blocks on the motherboard. UIO assemblies may be mounted in EDWARDS enclosures.

Standard Features

- **Multiple applications**
Including Alarm, Alarm with delayed latching (retard) for water-flow applications, Supervisory, and Monitor. The installer selects one of four “personality codes” to be downloaded to the module through the loop controller.
- **SIGA-CT1HT rated for high temperature environments**
Suitable for attic installation and monitoring high temperature heat detectors.
- **Plug-in (UIO) or standard 1-gang mount**
UIO versions allow quick installation where multiple modules are required. The 1-gang mount version is ideal for remote locations that require a single module.
- **Automatic device mapping**
Signature modules transmit information to the loop controller regarding their circuit locations with respect to other Signature devices on the wire loop.
- **Electronic addressing**
Programmable addresses are downloaded from the loop controller, a PC, or the SIGA-PRO Signature Program/Service Tool. There are no switches or dials to set.
- **Ground fault detection by address**
Detects ground faults right down to the device level.

Signature Series Overview

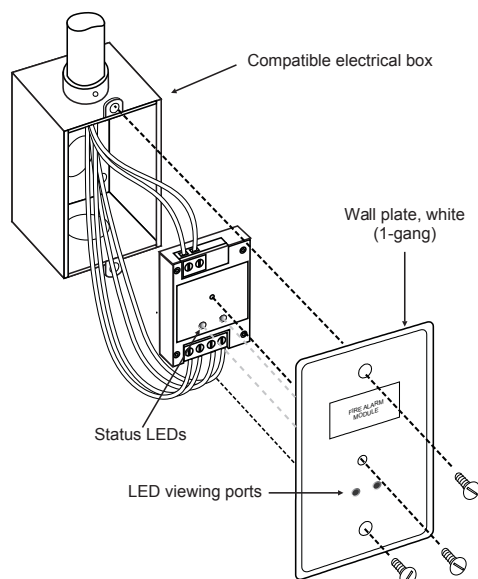
The Signature Series intelligent analog-addressable system from EDWARDS Security is an entire family of multi-sensor detectors and mounting bases, multiple-function input and output modules, network and non-network control panels, and user-friendly maintenance and service tools. Analog information from equipment connected to Signature devices is gathered and converted into digital signals. An onboard microprocessor in each Signature device measures and analyzes the signal and decides whether or not to input an alarm. The microprocessor in each Signature device provides four additional benefits – Self-diagnostics and History Log, Automatic Device Mapping, and Fast, Stable Communication.

Self-diagnostics and History Log – Each Signature Series device constantly runs self-checks to provide important maintenance information. The results of the self-check are automatically updated and permanently stored in its non-volatile memory. This information is accessible for review any time at the control panel, PC, or using the SIGA-PRO Signature Program/Service Tool.

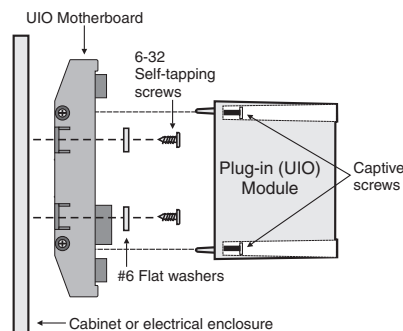
Automatic Device Mapping – The Signature Data Controller (SDC) learns where each device's serial number address is installed relative to other devices on the circuit. The SDC keeps a map of all Signature Series devices connected to it. The Signature Series Data Entry Program also uses the mapping feature. With interactive menus and graphic support, the wired circuits between each device can be examined. Layout or “as-built” drawing information showing branch wiring (T-taps), device types and their address are stored on disk for printing hard copy.

Installation

SIGA-CT1, SIGA-CT1HT and SIGA-CT2: modules mount to North American 2½ inch (64 mm) deep 1-gang boxes and 1½ inch (38 mm) deep 4 inch square boxes with 1-gang covers and SIGA-MP mounting plates. The terminals are suited for #12 to #18 AWG (2.5 mm² to 0.75 mm²) wire size.



SIGA-MCT2: mount the UIO motherboard inside a suitable EDWARDS enclosure with screws and washers provided. Plug the SIGA-MCT2 into any available position on the motherboard and secure the module to the motherboard with the captive screws. Wiring connections are made to the terminals on the motherboard (see wiring diagram). UIO motherboard terminals are suited for #12 to #18 AWG (2.5 mm² to 0.75 mm²) wire size.



Electronic Addressing – The loop controller electronically addresses each module, saving valuable time during system commissioning. Setting complicated switches or dials is not required. Each module has its own unique serial number stored in its on-board memory. The loop controller identifies each device on the loop and assigns a “soft” address to each serial number. If desired, the modules can be addressed using the SIGA-PRO Signature Program/Service Tool.

EDWARDS recommends that this module be installed according to latest recognized edition of national and local fire alarm codes.

Application

The duty performed by the SIGA-CT1 and SIGA-CT2/MCT2 is determined by their sub-type code or “Personality Code”. The code is selected by the installer depending upon the desired application and is downloaded from the loop controller.

One personality code can be assigned to the SIGA-CT1. Two personality codes can be assigned to the SIGA-CT2/MCT2. Codes 1, 2, 3 and 4 can be mixed on SIGA-CT2/MCT2 modules only. For example, personality code 1 can be assigned to the first address (circuit A) and code 4 can be assigned to the second address (circuit B).

NORMALLY-OPEN ALARM - LATCHING (Personality Code 1)

- Assign to one or both circuits. Configures either circuit A or B or both for Class B normally open dry contact initiating devices such as Pull Stations, Heat Detectors, etc. An ALARM signal is sent to the loop controller when the input contact is closed. The alarm condition is latched at the module.

NORMALLY-OPEN ALARM - DELAYED LATCHING (Personality Code 2)

- Assign to one or both circuits. Configures either circuit A or B or both for Class B normally-open dry contact initiating devices such as Waterflow Alarm Switches. An ALARM signal is sent to the loop controller when the input contact is closed for approximately 16 seconds. The alarm condition is latched at the module.

NORMALLY-OPEN ACTIVE - NON-LATCHING (Personality Code 3)

- Assign to one or both circuits. Configures either circuit A or B or both for Class B normally-open dry contact monitoring input such as from Fans, Dampers, Doors, etc. An ACTIVE signal is sent to the loop controller when the input contact is closed. The active condition is not latched at the module.

NORMALLY-OPEN ACTIVE - LATCHING (Personality Code 4)

- Assign to one or both circuits. Configures either circuit A or B or both for Class B normally open dry contact monitoring input such as from Supervisory and Tamper Switches. An ACTIVE signal is sent to the loop controller when the input contact is closed. The active condition is latched at the module.

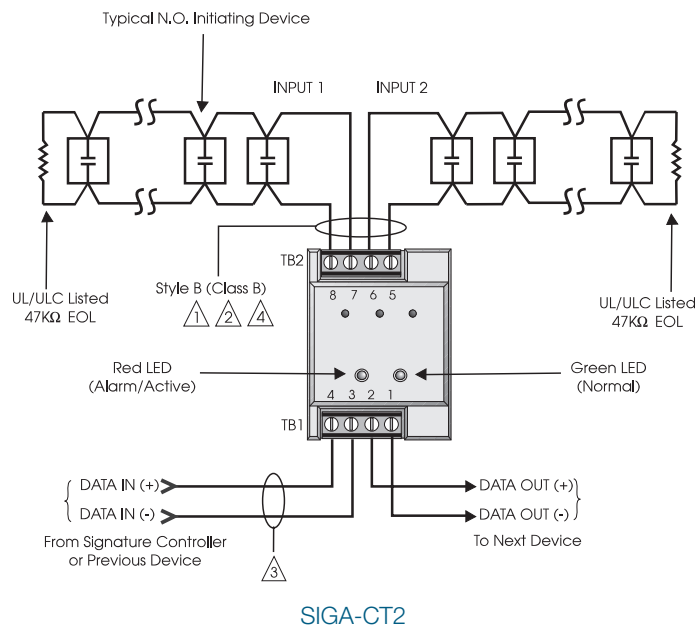
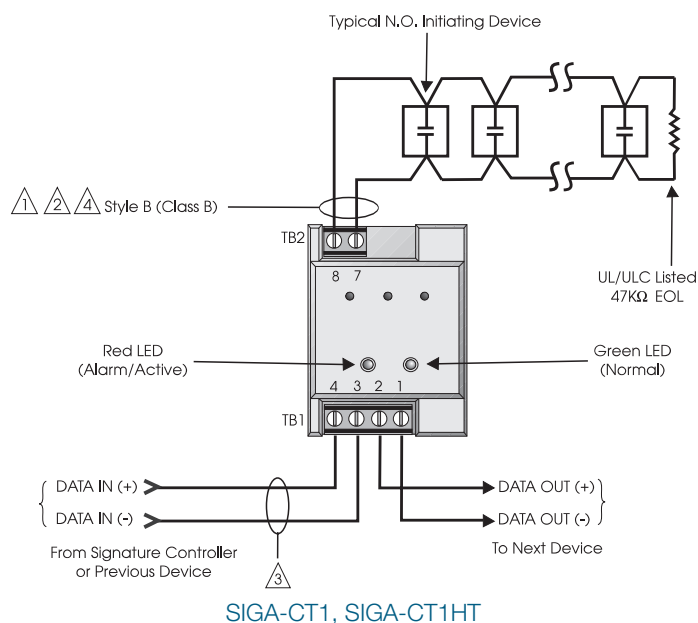
Typical Wiring

Modules will accept #18 AWG (0.75mm²), #16 (1.0mm²), and #14AWG (1.50mm²), and #12 AWG (2.50mm²) wire sizes.

Note: Sizes #16 AWG (1.0mm²) and #18 AWG (0.75mm²) are preferred for ease of installation. See Signature Loop Controller catalog sheet for detailed wiring requirement specifications.

Initiating (Slave) Device Circuit Wire Specifications

Maximum Allowable Wire Resistance	50 ohms (25 ohms per wire) per Circuit	
Maximum Allowable Wire Capacitance	0.1µF per Circuit	
For Design Reference:	Wire Size	Maximum Distance to EOLR
	#18 AWG (0.75 mm ²)	4,000 ft (1,219 m)
	#16 AWG (1.00 mm ²)	
	#14 AWG (1.50 mm ²)	
	#12 AWG (1.50 mm ²)	



NOTES

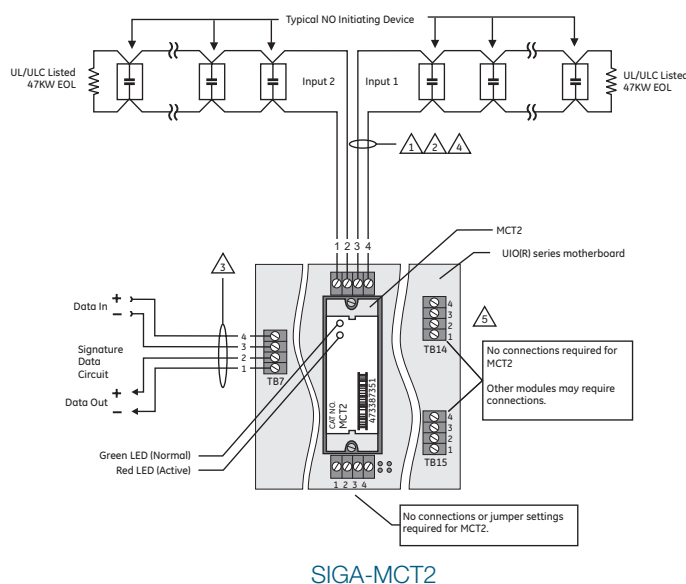
- 1 Maximum 25 Ohm resistance per wire.
- 2 Maximum #12 AWG (2.5 mm²) wire; Minimum #18 AWG (0.75 mm²).
- 3 Refer to Signature controller installation sheet for wiring specifications.
- 4 Maximum 10 Vdc @ 350 µA
- 5 The SIGA-UIO6R and the SIGA-UIO2R do not come with TB14.
- 6 All wiring is supervised and power-limited.
- 7 These modules will not support 2-wire smoke detectors.

Warnings & Cautions

This module will not operate without electrical power. As fires frequently cause power interruption, we suggest you discuss further safeguards with your local fire protection specialist.

Compatibility

These modules are part of EDWARDS's Signature Series intelligent processing and control platform. They are compatible with EST3, EST3X and iO Series control panels.





LIFE SAFETY & INCIDENT MANAGEMENT

Contact us...

Email: edwards.fire@fs.utc.com
Web: edwards-fire.com

1016 Corporate Park Drive
Mebane, NC 27302

EDWARDS is a registered mark in the
United States and other countries.

© 2018 United Technologies Corporation.
All rights reserved.

Specifications

Catalog Number	SIGA-CT1HT	SIGA-CT1	SIGA-CT2	SIGA-MCT2
Description	Single Input Module		Dual Input Module	
Type Code	48 (factory set) Four sub-types (personality codes) are available		49 (factory set) Four sub-types (personality codes) are available	
Address Requirements	Uses One Module Address		Uses Two Module Addresses	
Operating Current	Standby = 250µA; Activated = 400µA		Standby = 396µA; Activated = 680µA	
Operating Voltage	15.2 to 19.95 Vdc (19 Vdc nominal)			
Construction	High Impact Engineering Polymer			
Mounting	North American 2½ inch (64 mm) deep one-gang boxes and 1½ inch (38 mm) deep 4 inch square boxes with one-gang covers and SIGA-MP mounting plates			UIO2R/6R/6 Motherboard
Operating Environment	32°F to 158°F (0°C to 70°C)	32°F to 120°F (0°C to 49°C)		
Storage Environment	-4°F to 140°F (-20°C to 60°C); Humidity: 0 to 93% RH			
LED Operation	On-board Green LED - Flashes when polled; On-board Red LED - Flashes when in alarm/active.			
Compatibility	Use with Signature Loop Controller			
Agency Listings	UL, ULC, MEA, CSFM			

Ordering Information

Catalog Number	Description	Ship Wt. lbs (kg)
SIGA-CT1	Single Input Module — UL/ULC Listed	0.4 (0.15)
SIGA-CT1HT	Single Input Module High Temperature Operation UL/ULC Listed	0.4 (0.15)
SIGA-CT2	Dual Input Module — UL/ULC Listed	0.4 (0.15)
SIGA-MCT2	Dual Input Plug-in (UIO) Module — UL, ULC Listed	0.1 (0.05)

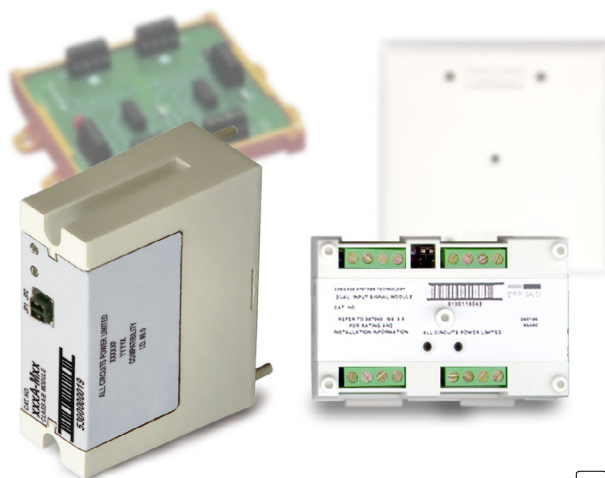
Related Equipment		
27193-11	Surface Mount Box - Red, 1-gang	1.0 (0.6)
27193-16	Surface Mount Box - White, 1-gang	1.0 (0.6)
SIGA-UIO2R	Universal Input-Output Module Board w/Riser Inputs — Two Module Positions	0.32 (0.15)
SIGA-UIO6R	Universal Input-Output Module Board w/Riser Inputs — Six Module Positions	0.62 (0.28)
SIGA-UIO6	Universal Input-Output Module Board — Six Module Positions	0.56 (0.25)
MFC-A	Multifunction Fire Cabinet — Red, supports Signature Module Mounting Plates	7.0 (3.1)
SIGA-MB4	Transponder Mounting Bracket (allows for mounting two 1-gang modules in a 2-gang box)	0.4 (0.15)
SIGA-MP1	Signature Module Mounting Plate, 1 footprint	1.5 (0.70)
SIGA-MP2	Signature Module Mounting Plate, 1/2 footprint	0.5 (0.23)
SIGA-MP2L	Signature Module Mounting Plate, 1/2 extended footprint	1.02 (0.46)



LIFE SAFETY & INCIDENT MANAGEMENT

Synchronization Output Module

SIGA-CC1S, MCC1S



Patented



Overview

SIGA-CC1S and MCC1S Synchronization Output Modules are intelligent analog addressable devices that form part of EDWARDS's Signature line of products. The actual operation of the SIGA-CC1S and MCC1S is determined by the "personality code" selected by the installer, which is downloaded to the module from the Signature loop controller during system configuration.

Depending on their assigned personality, Synchronization Output Modules may be used as a signal power riser selector to provide synchronization of fire alarm signals across multiple zones, or for connecting, upon command from the loop controller, supervised Class B signal or telephone circuits to their respective power inputs. The power inputs may be polarized 24 Vdc to operate audible and visible signal appliances or 25 and 70 VRMS to operate audio evacuation speakers and firefighter's telephones.

Standard Features

- **Provides UL 1971-compliant auto-sync output for visual signals**
Use for connecting a supervised output circuit to a supervised 24 Vdc riser input and synchronizing multiple notification appliance circuits.
- **Functions as an audible signal riser selector**
Use as a synch module or for connecting supervised 24 Vdc Audible/Visible signal circuits, or 25 and 70 VRMS Audio Evacuation and Telephone circuits to their power inputs.
- **Built-in ring-tone generator**
When configured for telephone circuits, the SIGA-CC1S generates its own ring-tone signal, eliminating the need for a separate ring-tone circuit.
- **Automatic device mapping**
Signature modules transmit information to the loop controller regarding their circuit locations with respect to other Signature devices on the wire loop.
- **Electronic addressing**
Programmable addresses are downloaded from the loop controller, a PC, or the SIGA-PRO Signature Program/Service Tool; there are no switches or dials to set.
- **Intelligent device with microprocessor**
All decisions are made at the module to allow lower communication speed with substantially improved control panel response time and less sensitivity to line noise and loop wiring properties; twisted or shielded wire is not required.

Application

The SIGA-CC1S mounts to a standard North American two-gang electrical box, making it ideal for locations where only one module is required. Separate I/O and data loop connections are made to each module.

The SIGA-MCC1S is part of the UIO family of plug-in Signature Series modules. It functions identically to the SIGA-CC1S, but takes advantage of the modular flexibility and easy installation that characterize all UIO modules. Two- and six-module UIO motherboards are available. These can accommodate individual risers for each on-board module, or risers that are shared by any combination of its UIO modules. All wiring connections are made to terminal blocks on the motherboard. UIO assemblies may be mounted in EDWARDS enclosures.

Personality Codes

The operation of the SIGA-CC1S is determined by their sub-type code or "Personality Code". The code is selected by the installer depending upon the desired application and is downloaded from the loop controller.

Personality Code 5: Signal Power or Audio Evacuation (single riser). Configures the module for use as a Class B Audible/Visible Signal power (24 Vdc polarized) or Audio Evacuation (25 or 70 VRMS) power selector. The ring-tone generator is disabled. The output circuit is monitored for open or shorted wiring. If a short exists, the control panel inhibits the activation of the audible/visible signal circuit to prevent connection to the power circuit.

Personality Code 6: Telephone with ring-tone (single riser). Configures the module for use as a Telephone power selector. When a telephone handset is plugged into its jack or lifted from its hook, the module generates its own Ring-Tone signal. A separate ring-tone circuit is not needed. The module sends this signal to the control panel to indicate that an off-hook condition is present. When the system operator responds to the call, the ring-tone signal is disabled.

Personality Code 25: Visual Signal Synchronization. This personality code configures the module to provide synchronization of fire alarm signals across multiple zones. It functions as a signal power (24 Vdc) riser selector. The output wiring is monitored for open circuits and short circuits. A short circuit will cause the fire alarm control panel to inhibit the activation of the audible/visual signal circuit so the riser is not connected to the wiring fault.

Warnings & Cautions

This module will not operate without electrical power. As fires frequently cause power interruption, we suggest you discuss further safeguards with your fire protection specialist.

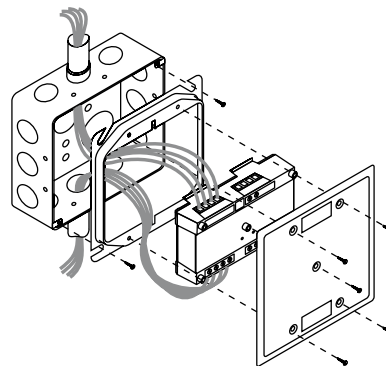
EDWARDS recommends that these modules be installed according to latest recognized edition of national and local fire alarm codes.

Compatibility

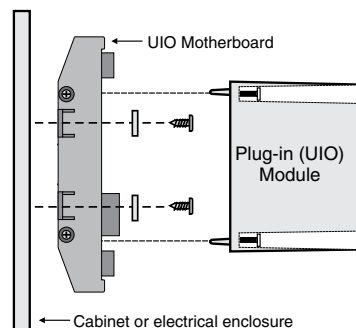
These modules are part of EDWARDS's Signature Series intelligent processing and control platform. They are compatible with EST3, EST3X and iO Series control panels.

Installation

The SIGA-CC1S: mounts to North American 2-1/2 inch (64 mm) deep 2-gang boxes and 1-1/2 inch (38 mm) deep 4 inch square boxes with 2-gang covers and SIGA-MP mounting plates. The terminals are suited for #12 to #18 AWG (2.5 mm² to 0.75 mm²) wire size.



SIGA-MCC1S: mount the UIOxR motherboard inside a suitable EDWARDS enclosure with screws and washers provided. Plug the module into any available position on the motherboard and secure the module to the motherboard with the captive screws. Wiring connections are made to the terminals on the motherboard (see wiring diagram). UIOxR motherboard terminals are suited for #12 to #18 AWG (2.5 mm² to 0.75 mm²) wire size.



Electronic Addressing

The loop controller electronically addresses each module saving valuable time during system commissioning. Setting complicated switches or dials is not required. Each module has its own unique serial number stored in its "on-board memory". The loop controller identifies each device on the loop and assigns a "soft" address to each serial number. If desired, the modules can be addressed using the SIGA-PRO Signature Program/Service Tool.

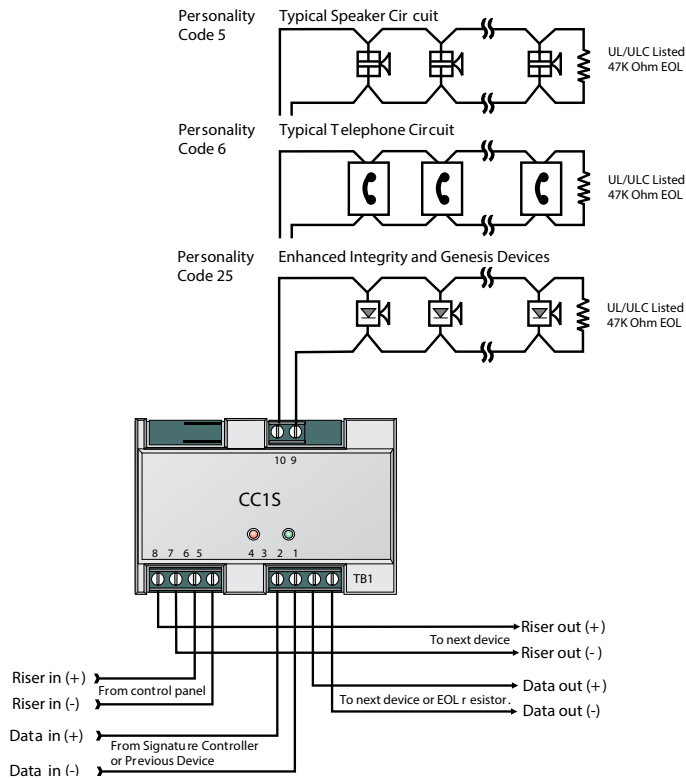
Testing & Maintenance

The module's automatic self-diagnosis identifies when it is defective and causes a trouble message. The user-friendly maintenance program shows the current state of each module and other pertinent messages. Single modules may be turned off (de-activated) temporarily, from the control panel.

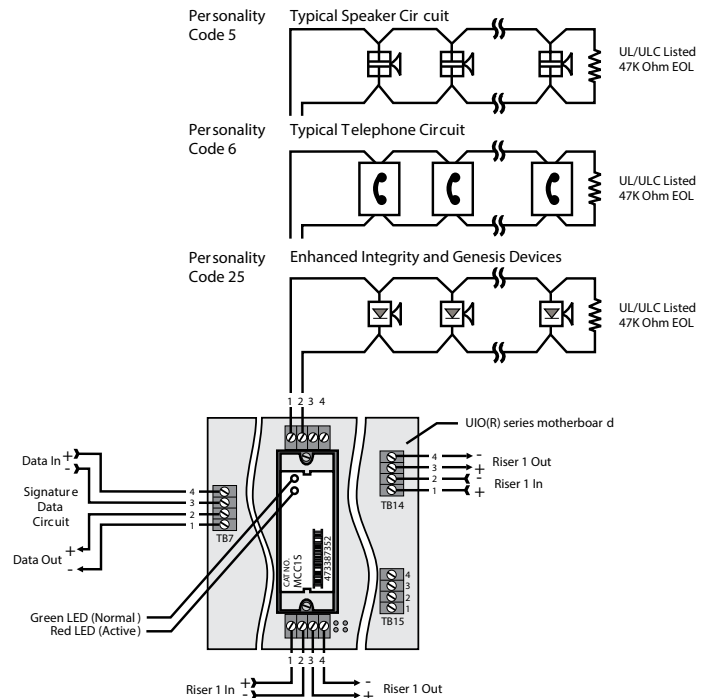
Scheduled maintenance (Regular or Selected) for proper system operation should be planned to meet the requirements of the Authority Having Jurisdiction (AHJ). Refer to current NFPA 72 and ULC CAN/ULC 536 standards.

Typical Wiring

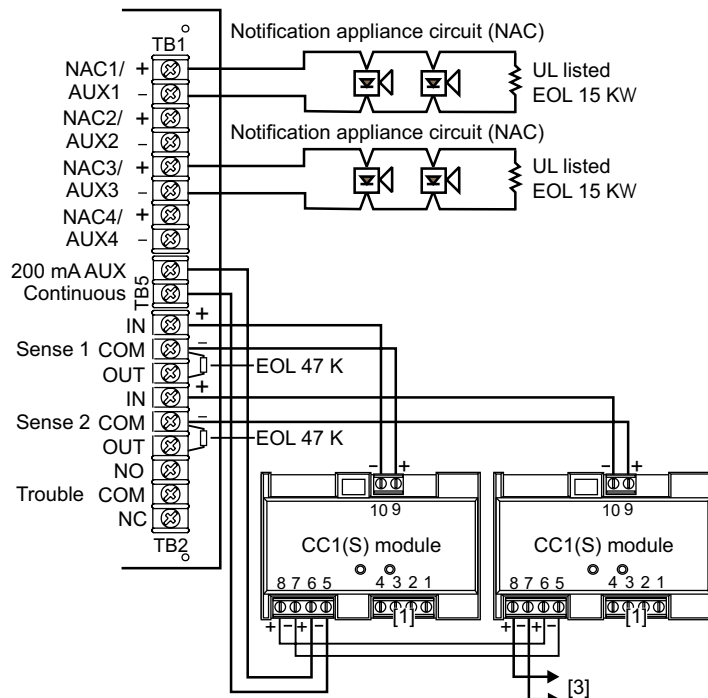
SIGA-CC1S (Standard Mount)



SIGA-MCC1S (UIO Mount)



Multiple CC1(S) modules using the BPS's sense inputs





LIFE SAFETY & INCIDENT MANAGEMENT

Contact us

Phone: 800-655-4497 (Option 4)
Email: edwards.fire@carrier.com
Website: edwardsfiresafety.com

8985 Town Center Pkwy
Bradenton, FL 34202

© 2020 Carrier
All rights reserved.

Specifications

Catalog Number	SIGA-CC1S	SIGA-MCC1S
Mounting	North American 2½ inch (64 mm) deep two-gang boxes and 1½ inch (38 mm) deep 4 inch square boxes with 2-gang covers and SIGA-MP mounting plates	Plugs into UIO2R, UIO6R or UIO6 Motherboards
Description	Synchronization Output Module	
Type Code	50 (factory set)	
Address Requirements	Uses one module address	
Wiring Terminations	Suitable for #12 to #18 AWG (2.5 mm² to 0.75mm²)	
Operating Current	Standby = 223µA Activated = 100µA	
Operating Voltage	15.2 to 19.95 Vdc (19 Vdc nominal)	
Output Rating	24 Vdc = 2 amps 25 V Audio = 50 watts 70 V Audio = 35 watts	
Construction	High Impact Engineering Polymer	
Storage and Operating Environment	Operating: 32°F to 120°F (0°C to 49°C) Storage: -4°F to 140°F (-20°C to 60°C) Humidity: 0 to 93% RH	
LED Operation	Green LED - Flashes when polled Red LED - Flashes when in alarm/active	
Compatibility	Use with: Signature Loop Controller under EST3 version 2.0 or higher	
Agency Listings	UL, ULC, CSFM, MEA	

Ordering Information

Catalog Number	Description	Shipping Wt. lbs (kg)
SIGA-CC1S	Synchronization Output Module (Standard Mount) - UL/ULC Listed	0.5 (0.23)
SIGA-MCC1S	Synchronization Output Module (UIO Mount) - UL/ULC Listed	0.18 (0.08)

Related Equipment		
27193-21	Surface Mount Box - Red, 2-gang	2 (1.2)
27193-26	Surface Mount Box - White, 2-gang	2 (1.2)
SIGA-UIO2R	Universal Input-Output Module Board w/Riser Inputs - Two Module Positions	0.32 (0.15)
SIGA-UIO6R	Universal Input-Output Module Board w/Riser Inputs - Six Module Positions	0.62 (0.28)
SIGA-UIO6	Universal Input-Output Module Board - Six Module Positions	0.56 (0.25)
235196P	Bi-polar Transient Protector	0.01 (0.05)
MFC-A	Multifunction Fire Cabinet - Red, supports Signature Module Mounting Plates	7.0 (3.1)
SIGA-MP1	Signature Module Mounting Plate, 1 footprint	1.5 (0.70)
SIGA-MP2	Signature Module Mounting Plate, 1/2 footprint	0.5 (0.23)
SIGA-MP2L	Signature Module Mounting Plate, 1/2 extended footprint	1.02 (0.46)



LIFE SAFETY & INCIDENT MANAGEMENT

Single-Action Fire Alarm Stations

276/277B Series



S2318

7150-1657:
0111

Overview

The EDWARDS Cat. No. 276B/277B series noncoded fire alarm stations are contemporary styled Lexan stations and are flexibly designed to meet a wide variety of application requirements and operational sequences.

The Cat. No. 276B series are single action stations with terminals for field wiring connections.

The Cat. No. 277B series are also single action stations but use 6" (150mm) wire leads for field wiring connections.

All types are available with single or double pole alarm contacts which can be normally open, normally closed or a combination of both. Either a key or tool (depending on station selected) is required to reset mechanism. See specification chart for specific catalog numbers and features.

For semi flush mounting use a standard North-American 4 inch square box with single gang plaster cover having an overall minimum depth of 2-1/4 inches (57mm). For surface mounting use a Cat. No. 276B-RSB surface back box.

Standard Features

- Single action models
- Single or double pole contacts
- Terminals or wire leads for field connections
- Pre-signal or general alarm operation
- Key lock or tool reset
- Break glass operation
- Surface or semi flush mounting
- Red finish
- Contemporary styling
- Rugged LEXAN construction
- Latch action until reset

Operation

To initiate an alarm and break the glass rod, pull down on the handle marked “Pull for Fire”.

The alarm handle latches in the pulled position until the station is manually reset. To reset, the station is opened using a Cat. No. 276-K1 key supplied with the station, or a tool; the toggle switch is restored to it's normal position, the break glass rod is replaced and the station is reclosed. For presignal type stations, the general alarm can be initiated by authorized personnel from any operated station by inserting Cat. No. 276-K2 key into the keyswitch behind the alarm handle and turning it clockwise.

Engineering Specifications

Furnish and install where indicated on plans, Cat. No. (Select one of the following:)

- (276B series single action manual stations with screw terminals)
- (277B series single action manual stations with 6 inch (150mm) wire leads)

for connection of installation wiring. All stations shall be of the noncoded break glass type.

The stations shall be constructed of red lexan with white raised letters. The alarm handle shall be marked “PULL FOR FIRE”, to provide simple, concise instructions for activation of station by the general public.

Pulling the alarm handle shall break a glass rod and activate a toggle switch which shall cause the handle to latch in the alarm position. Momentary push button type switches shall not be acceptable. To reset the station it shall be necessary to open the station using (select one) (a key) (a special tool), restore the toggle switch to its normal position and replace the glass rod.

Stations shall be UL listed.

Technical Specifications

Contact Ratings

General Alarm Switch/Keyswitch

Single Pole	3.0 Amps, 30 Vac, Resistive Load 1.0 Amps, 28 Vdc, Resistive Load
Double Pole	1.5 Amps, 30 Vac, Resistive Load 1.0 Amps, 28 Vdc, Resistive Load

Resistor Kit for use in stations connected to smoke detector circuits

Station Housing	Red Lexan 940 With White Letters
Weight	1 lb (0.4 kg)

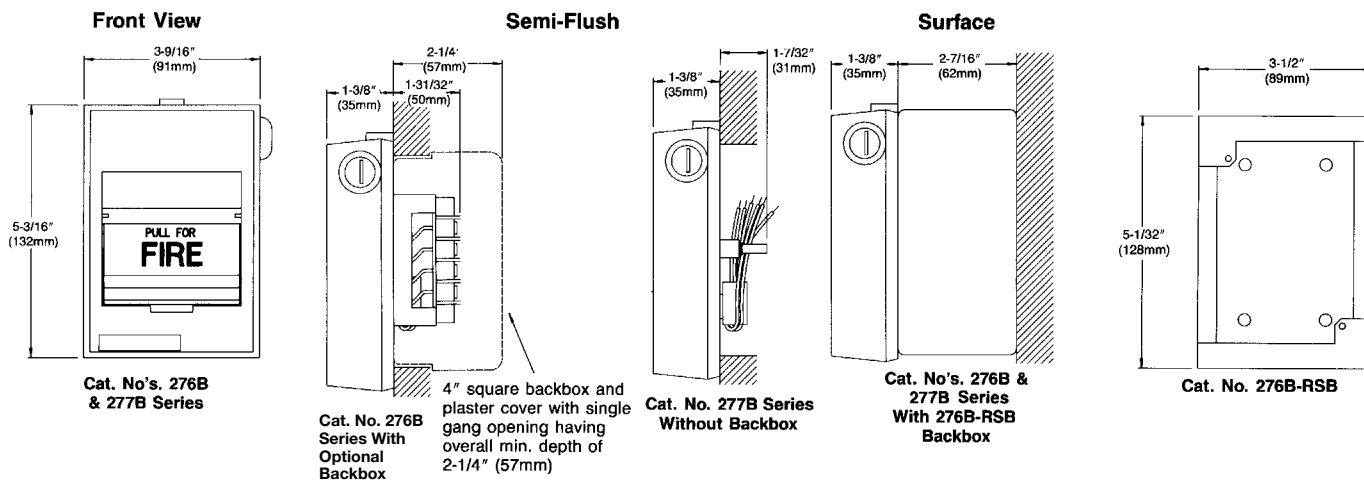
Accessories

276-GLR	Replacement of Glass Rods
276-K1	Station Reset Key, Supplied with all Key Reset Stations
276-K2	General Alarm key, Must be ordered separately.
276B-RSB	Surface Back Box, Red.

WARNING: These devices will not operate without electrical power. As fires frequently cause power interruptions, we suggest you discuss further safeguards with your local fire protection specialist.

Mounting

*Suitable for optional resistor kit (276-R)



Ordering Information

Catalog Number	Field Connections		Switch Contacts				Station Reset		Type Alarm		Agency Approvals
Single Action Pull Stations	Screw Terminals	6" (150mm) Wire Leads	Single Pole Alarm Contact	Double Pole Contact	Open Circuit	Closed Circuit	Tool Operated Reset	Key Operated Reset	Presignal Alarm Contacts	General Alarm Contacts	UL Listed
276B-1110	X		X		X		X			X	X
276B-1120	X		X		X			X		X	X
276B-1320	X			X	X			X		X	X
276B-1420	X			X	X	X		X		X	X
277B-1110		X	X		X		X			X	X
277B-1120		X	X		X			X		X	X



LIFE SAFETY & INCIDENT MANAGEMENT

Contact us

Phone: 800-655-4497 (Option 4)

Email: edwards.fire@carrier.com

Website: edwardsfiresafety.com

8985 Town Center Pkwy
Bradenton, FL 34202

© 2020 Carrier
All rights reserved.

LIFE SAFETY *&* INCIDENT MANAGEMENT

Double-Action Fire Alarm Stations

278/279B Series — Non-Coded



S2318

MEA

7150-1657:
0111

Overview

The EDWARDS Cat. No. 278B/279B series noncoded fire alarm stations are contemporary styled Lexan stations and are flexibly designed to meet a wide variety of application requirements and operational sequences.

The Cat. No. 278B series are double action stations with terminals for field wiring connections.

The Cat. No. 279B series are double action stations with six inch (150mm) wire leads for field wiring connections.

All types can be either presignal or general alarm and are available with single or double pole alarm contacts which can be normally open, normally closed or a combination of both. Either a key or tool (depending on station selected) is required to reset mechanism. See specification chart for specific catalog numbers and features.

For semi flush mounting use a standard North-American four inch square box with a single gang plaster cover having an overall minimum depth of 2-1/4 inch (57mm). For surface mounting use a Cat. No. 276B-RSB surface back box.

Standard Features

- Double action models
- Single or double pole contacts
- Terminals or wire leads for field connections
- Presignal or general alarm operation
- Key lock or tool reset
- Break glass operation
- Surface or semi flush mounting
- Red finish
- Contemporary styling
- Rugged LEXAN construction
- Latch action until reset

Operation

To initiate an alarm it is necessary to first lift the upper door marked “LIFT THEN PULL HANDLE”, and then pull the alarm handle.

The alarm handle latches in the pulled position until the station is manually reset. To reset, the station is opened using a Cat. No. 276-K1 key supplied with the station, or a tool; the toggle switch is restored to it's normal position, the break glass rod is replaced and the station is reclosed. For presignal type stations, the general alarm can be initiated by authorized personnel from any operated station by inserting a Cat. No. 276-K2 key into the keyswitch behind the alarm handle and turning it clockwise.

Engineering Specifications

Furnish and install where indicated on plans, Cat. No. (Select one of the following:)

(278B series double action manual stations with screw terminals)

(279B series double action manual stations with six inch (150mm) wire leads)

for connection of installation wiring. All stations shall be of the noncoded break glass type.

The stations shall be constructed of red lexan with white raised letters. The alarm handle shall be marked “PULL FOR FIRE”, to provide simple, concise instructions for activation of station by the general public. It shall be necessary to first lift an upper door marked “LIFT THEN PULL HANDLE” to gain access to the alarm handle.

Pulling the alarm handle shall break a glass rod and activate a toggle switch which shall cause the handle to latch in the alarm position. Momentary push button type switches shall not be acceptable. To reset the station it shall be necessary to open the station using (select one) (a key) (a special tool), restore the toggle switch to its normal position and replace the glass rod. Stations shall be UL listed.

Technical Specifications

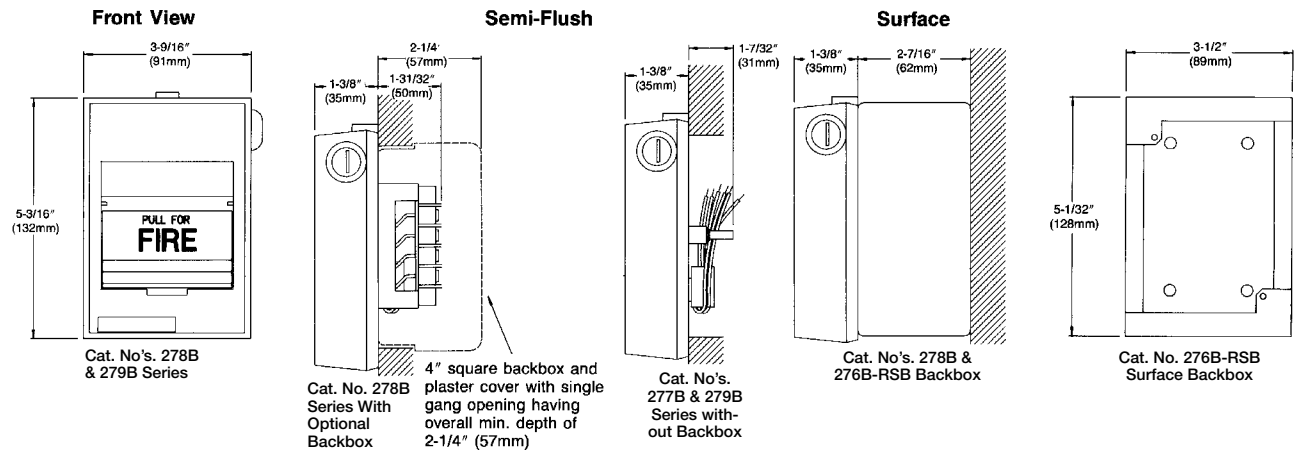
Contact Ratings: General Alarm Switch/Keyswitch	
Single Pole	3.0 Amps, 30 Vac, Resistive Load 1.0 Amps, 28 Vdc, Resistive Load
Double Pole	1.5 Amps, 30 Vac, Resistive Load 1.0 Amps, 28 Vdc, Resistive Load
(For stations connected to smoke detector circuits)	2 W
Station Housing	Red Lexan 940 with White Letters
Weight	1 lb (0.4 kg)
Agency Listings	UL38 (S218), FM

Accessories

276-GLR	Replacement Package of Glass Rods
276-K1	Station Reset Key, Supplied with all Key Reset Stations
276-K2	General Alarm Key. Must be ordered separately.
276B-RSB	Surface Back Box, Red.

WARNING: These devices will not operate without electrical power. As fires frequently cause power interruptions, we suggest you discuss further safeguards with your local fire protection specialist.

Mounting



Ordering Information

Catalog Number	Field Connections		Switch Contacts				Station Reset		Type Alarm		Agency Approvals	Series Resistor Kit	
Double Action Pull Stations	Screw Terminals	6" (150mm) Wire Leads	Single Pole Alarm Contact	Double Pole Contact	Open Circuit	Closed Circuit	Tool Operated Reset	Key Operated Reset	Presignal Alarm Contacts	General Alarm Contacts	UL Listed	276-R	276-RT
278B-1110	X		X		X		X			X	X	X	
278B-1120	X		X		X			X		X	X	X	
278B-1320	X			X	X			X		X	X		X
278B-1420	X			X	X	X		X		X	X		X
278B-2110	X		X		X		X		X	X	X	X	X
278B-2320	X			X	X			X	X	X	X		
279B-1110		X	X		X		X			X	X		
279B-1120		X	X		X			X		X	X		
279B-1320		X		X	X			X		X	X		



LIFE SAFETY & INCIDENT MANAGEMENT

Contact us

Phone: 800-655-4497 (Option 4)

Email: edwards.fire@carrier.com

Website: edwardsfiresafety.com

8985 Town Center Pkwy
Bradenton, FL 34202

© 2020 Carrier
All rights reserved.
