# EST3 Unified Control Platform with Synergy

### Overview

The 3-SAC Security/Access Control Module is a key component in the true integration of security and access control functions into the EST3 multiplexed life safety system. The 3-SAC is the demarcation point between fire and security/access functions. For jurisdictions requiring independent wiring of fire and security devices, the 3-SAC offers two independent circuits. Where fire and security devices are permitted to be connected to the same circuit, both circuits can support both fire and security functions. All security devices that connect to a 3-SAC are designed and tested to strict fire alarm standards. For example, to enhance reliability, the 3-SAC can be wired in a Class A (Style 6) configuration, thus delivering an additional level of system survivability over traditional systems employing Class B wiring.

The 3-SAC can be used in combination with the Modcom Modem Communicator. The Modcom's dialer (DACT) function is used to transmit alarms to one or more central monitoring stations and/or paging terminals. Additionally, information received by the Modcom can be downloaded through the 3-SAC to individual security/access devices. Please refer to the Modcom catalog sheet for additional details

Total integration of the EST3 system assures that processing of fire alarm signals always receives the highest priority over routine signal processing. Power for the 3-SAC comes from the same highly reliable power supply/battery combination used to power the fire alarm components. Any Control Display module will mount in front of the 3-SAC, allowing great flexibility of the system user interface layout.

## Standard Features

- Listed for fire, security, and access control
- Two supervised RS-485 device circuits
- Class A configuration supports 30 Card reader controllers and/or keypad/displays
- Class B configuration supports 62 card reader controllers and/or keypad-displays
- 4,000 ft (1,220 m) max circuit length
- EST3 local rail module
- Supports control/display modules
- Supervised by the network controller
- 100% digital communication
- Removable field wiring terminal block

# Security/Access Control Module









## **Application**

The 3-SAC is used to connect the Card Reader Controllers and Keypad Displays to the EST3 network. This permits the network to perform functions network-wide in response to fire and/or security events. A common example is the network's ability to unlock specified doors in the event of a fire emergency, without the need for hardwired interconnections between fire and access control components.

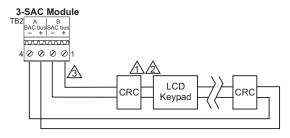
The 3-SAC and a simple program rule are all that is required to unlock the doors. Want to disarm security partitions automatically when an authorized cardholder enters the building, the 3-SAC and another system rule provide a simple solution.

## **Engineering Specification**

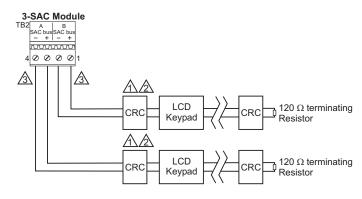
The security and access control module shall be capable of supporting 62 devices on two class B circuits or where added reliability is required, 30 devices on a single Class A circuit. It must be possible to wire Class A in Style 6 configuration. The module shall be capable of supporting both fire and security devices on the same circuit. The module shall permit total integration of the fire, security and access control functions by the system. The module shall be <UL> <ULC> listed for both fire and security applications.

## **Typical Wiring**

#### Class A wiring



#### Class B wiring



#### Notes:

Refer to device installation sheets for proper wiring connections.

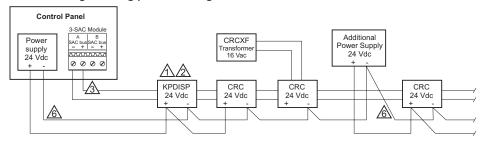
Maximum of 30 devices (Class A), 62 devices (31 per loop) (Class B).

Security Access Control Bus

- 4. Up to 4,000 ft. (1,220 m). All wiring is power limited and supervised.
- CRCs require 24Vdc or local transformer for operational power. KPDISP requires 24Vdc for power.

## Continuity of the minus from the control panel's power supply must be maintained with all devices communicating with the panel's 3-SAC.

#### Class B wiring showing power cabling



## Specifications

Agency Listings	UL, ULC. See Note 1.	
Circuit Configuration	Class A or Class B	
Circuit Capacity	30 devices on one Class A circuit, 62 devices on two circuits wired Class B	
Input Current	32 mA under all conditions	
Wire Size	22 AWG to 14 AWG (0.25mm² to 1.5mm²)	
Wire Type	Unshielded, twisted pair, > 6 twists per foot	
Maximum Line Resistance	52 Ohms	
Maximum Capacitance	0.1 μF	
Operating Environment	0°C to 49° Complete (32°F to 120°F) @ 85%RH, Non-condensing	
Mounting	One Local Rail Space	

#### Note 1

The EST3 is modularly listed under the following standards:

UL 864 categories: UOJZ, UOXX, UUKL and SYZV, UL 294 category ALVY, UL 609
category AOTX, UL 636 category ANET, UL 1076 category APOU, UL 365 category
APAW, UL 1610 category AMCX, UL 1635 category AMCX ULC-S527, ULC-S301, ULC-S302, ULC-S303, ULC-S304, ULC-S306, ULC/ORD-C1076 and ULC/ORD-C693.
Please refer to EST3 Installation and Service Manual for complete system
requirements.

# Ordering Information

Catalog Number	Description	Shipping Wt. lb (kg)
3-SAC	Security/Access Control Module	0.5 (.23)

# GE Security

U.S. T 888-378-2329 F 866-503-3996

Canada T 519 376 2430 F 519 376 7258

Asia T 852 2907 8108 F 852 2142 5063

Australia T 61 3 9259 4700 F 61 3 9259 4799

Europe T 32 2 725 11 20 F 32 2 721 86 13

Latin America T 305 593 4301 F 305 593 4300

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