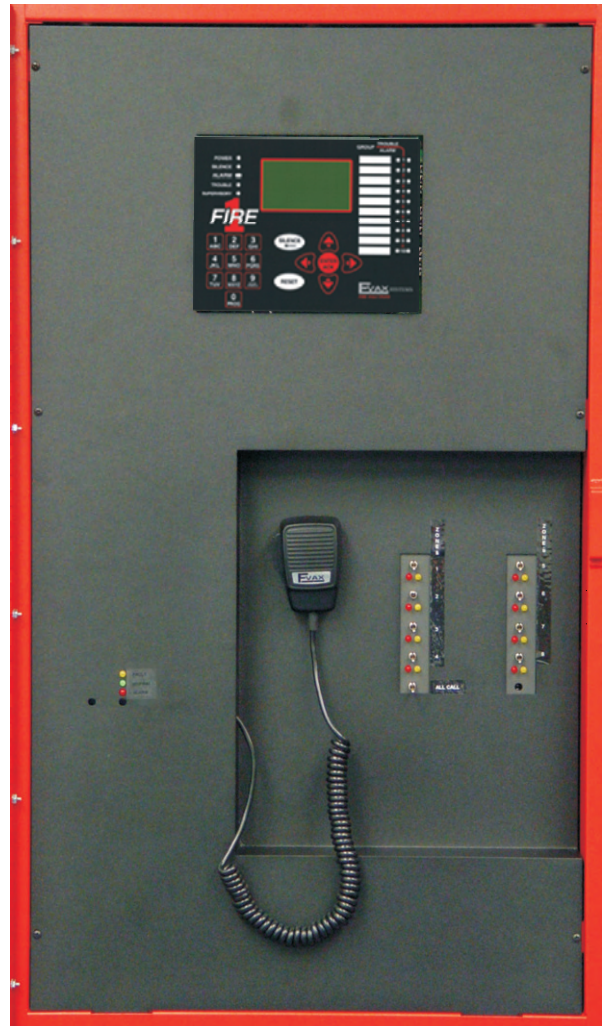


EF3V

Addressable/Conventional Fire Alarm Control Panel with Integrated Voice

FEATURES:

- Modular Design
- Addressable & Conventional Inputs
- 1 Addressable Loop per Panel
- Multiple Protocols:
 - Evax - Up to 254 Devices
 - Apollo - Up to 126 Devices
 - System Sensor - Up to 198 Devices
 - SLC Protocols run simultaneously
- Flash/Non-Flash LED Option
- Day / Night sensitivity settings
- Alarm Verification/Drift Compensation
- Up to 60 Conventional Zones
- Integral UDACT, SIA1 or Contact ID
- 3 Notification Appliance Circuits
- Notification Device Synchronization
- All Circuits Power Limited
- 4 Amp Power Supply
- Panel to Panel Networking (Fire Only)
 - Peer to Peer Communication
 - Up to 254 Nodes
- Remote programming option
- Up to 15 Remote LCD Annunciators
- Integrated Voice
 - 25W, 50W or 100W Amplifier
 - 25 or 70 VRMS - Field Selectable
 - Live Microphone Override
 - 4 Minute Message Capacity
 - Studio Quality Voice Recording
 - Optional Supervised Remote Microphone
 - 1, 2 or 4 Class A Speaker Circuits
 - 1, 4 or 8 Class B Speaker Circuits



EF3V-25-8Z



Listed to UL 864 9th Edition

DESCRIPTION

The Evax FIRE 1 Series EF3V Fire Alarm Control Panel (FACP) is a completely modular design that can be addressable and/or conventional. The basic FACP Model EF3V comes with 1 addressable Signaling Line Circuit (SLC) and cannot be expanded with additional SLC's. The EF3V can be configured with up to 6 EF1-CM Conventional Zone cards providing a total of 30 Class A or 60 Class B Initiating Device Circuits (IDC's).

The EF3V provides 1 SLC and the loop will simultaneously communicate with Evax, Apollo and System Sensor protocol.

With Evax Devices up to 254 may be used on the Loop. For Apollo, the SLC loop can handle up to 126 devices. The System Sensor protocol allows up to 99 sensors (Smoke & Heat detectors) and up to 99 modules (Monitor & Control) per loop for a maximum of 198 devices per EF3V panel. The maximum number of devices on the Loop is 254. Therefore if multiple protocol devices are used, each device must be set to it's own unique address within it's range. The total number of devices cannot exceed 254. The SLC can be field wired for Class B (Style 4) or Class A (Style 6 or 7).

The EF3V can also accommodate conventional devices by employing EF1-CM Conventional Zone Cards. Each EF1-CM card provides 5 Class A or 10 Class B IDC's. A maximum of 6 EF1-CM cards may be used. External EF1-CM cards can be mounted up to 4,000 feet from the main FACP.

The EF3V employs an integral UDACT which may be configured for Contact ID or SIA1. RJ11 connections are provided for 2 phone lines.

3 Notification Appliance Circuits (NAC's) can each provide up to 1.8 Amps maximum and can be wired either Class A or B. Each NAC can alternately be software configured to provide continuous or resettable 24VDC power. Horn/Strobe synchronization is available for Gentex devices. All circuits are power limited.

The EF3V provides 250 user programmable software groups which can be associated with multiple input and output devices/circuits.

The EF3V FACP has the ability of remotely programming and troubleshooting the panel through the use of an optional modem installed at the FACP.

The EF3V can *auto program* devices on an addressable loop or program conventional zones on the system. Additionally the EF3V provides automatic drift compensation and alarm verification.

It is easily programmed using the fire panel display/keypad or through the user friendly Evax Systems program software.

EF1-RC dual form C programmable relay cards can be connected to the EF3V and to EF1-CM cards (see figure on page 3). The EF3V FACP also provides alarm, supervisory and trouble contacts. All relay contacts are rated 2A @ 30V AC/DC.

Adding the EF1-NTWK Network card to the EF3V allows up to 254 EF1, EF2 & EF3V FACP's to be interconnected using twisted pair copper and/or fiber. Auto data rate allows each network link to operate at the most efficient communication speed.

The EF3V supports up to 15 remote connected EF1-ANN LCD annunciators using the RS485 communication buss. This buss also connects to the City Tie/Reverse Polarity Module model EF1-UCT, & Serial Relay Module (8 addressable relays) model EF1-SRM (6 maximum per EF3V panel).

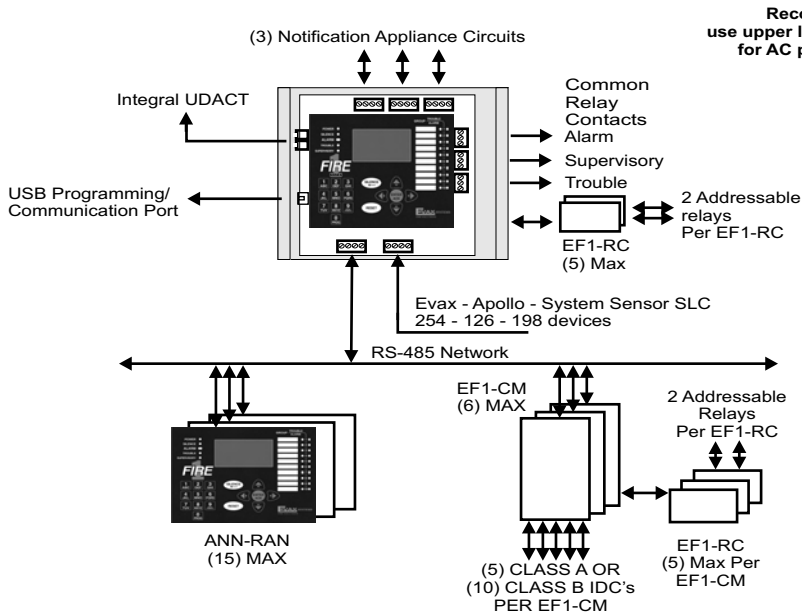
The EF3V includes all the necessary features to provide an effective voice evacuation system. With the addition of zone splitters, remote microphone panels, and audio expander modules the EF3V can be custom configured to satisfy the needs of most applications.

A digital message repeater (DMR) is built into the EF3V. The selection of alarm tone and automatic message repeats, as well as the 6 hour delay of the AC power failure reporting are all field configurable. The paging microphone is an integral component. Removal of the microphone from the EF3V will cause a "trouble" condition.

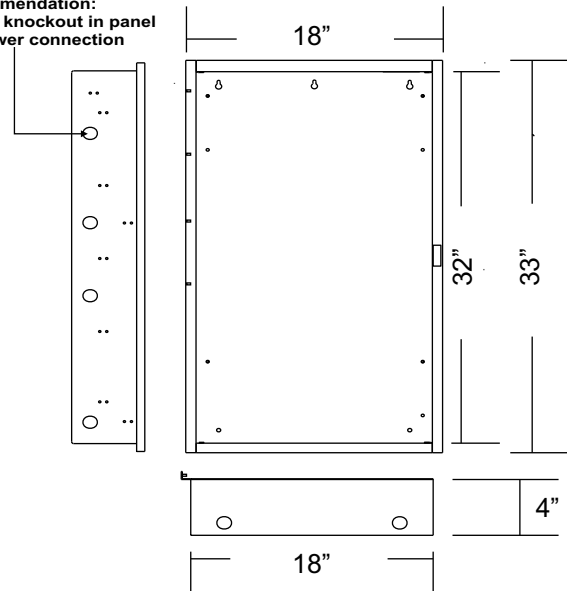
Both Class A and Class B speaker zone splitters are optionally available and provide 2 or 4 Class A or 4 or 8 Class B circuits.

Amplifier modules are available in 25, 50 & 100 Watt power ratings and can be field adjusted for either 25 or 70 Volt audio output. All circuits are power limited.

The EF3V operates on 120VAC @50/60Hz and optionally on 240VAC @50/60Hz.



Recommendation:
use upper left knockout in panel
for AC power connection



Engineering Specification

The Fire Alarm Control Panel (FACP) shall be Addressable loop and Conventional Zone capable. Standard FACP shall be a single loop addressable circuit, with optional ten (10) zones of conventional circuits expandable to sixty (60). The panel shall utilize an 8 x 20 character Liquid Crystal Display (LCD) with LED backlight. System shall be capable of recording a 1,000 event history log.

The system shall be multiple addressable protocol capable and allow any combination of addressable Evax, Apollo or System Sensor addressable devices on the loop simultaneously for a total of 254 mixed protocol devices per loop.

Conventional zones may be added using zone expander modules. Each expander module shall add an additional 10 conventional zones. These expander cards shall be housed in their own cabinets and be capable of being remotely located up to 4,000 feet from the main FACP.

The main FACP shall communicate with addressable devices in both digital and analog communications formats. Panels without dual format will not be accepted. The system shall have auto program capability, sensitivity adjustments, day/night sensitivity, holiday scheduling, off site programming and troubleshooting, shall be capable of adding internal Form "C" relay contacts housed in the main FACP cabinet, and be capable of automatic drift compensation.

System shall be programmed using proprietary software or from the FACP's Keypad.

Panel shall have integral UDACT operating with Contact ID or SIA format.

The panel shall supply three (3) on-board Notification Appliance Circuits (NAC's) that support multiple synchronization protocols. Each NAC may be programmed as auxiliary power.

The panel shall charge up to 40 AHr's of standby batteries without the use of an external power supply.

Panel shall have the ability to add up to 15 remote LCD/LED Annunciators.

The panel shall support the interconnection of 254 panels in a single networked system using twisted pair copper and/or fiber optic cable. Each node pair shall provide for automatic data rate optimization to allow maximum communication speed while minimizing data errors. Panels which do not provide automatic data rate optimization will not be considered equal.

The Fire Alarm with integrated voice panel shall have 25W, 50W or 100 Watts of voice power. It shall contain an integral microphone, a tone generator and a digital message repeater. The system shall have the ability to have up to 8 class B or 4 class A speaker circuits within a single cabinet.

The voice evacuation message/signal shall be broadcast until the system is silenced or reset. Emergency personnel may interrupt the broadcast with a manual message or page. Upon reset the system shall automatically return to standby.

A secondary message shall be provided which can be triggered by the closure of a contact either within the FACP or from any normally open contact device.

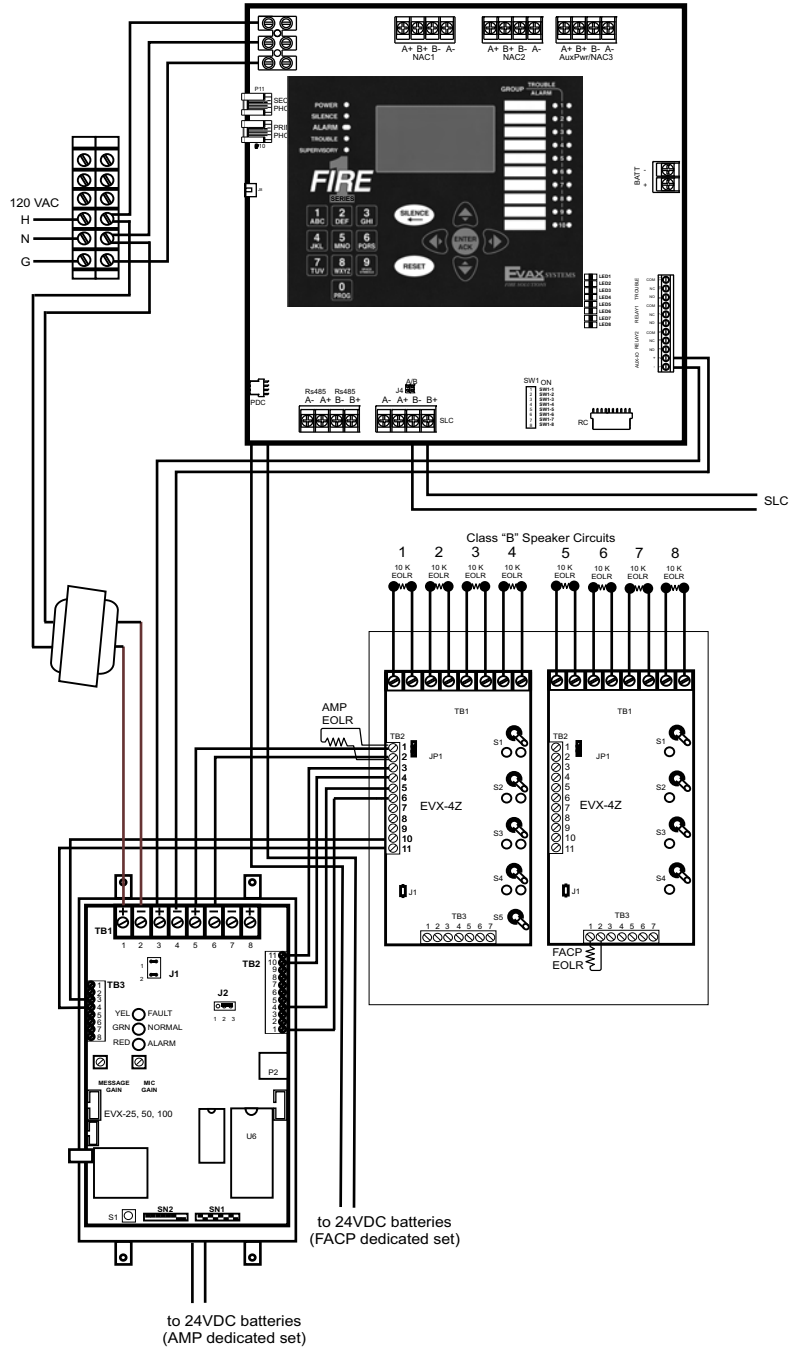
System shall be capable of up to 5 remote paging microphone(s). Remote microphone(s) may be mounted up to 5000 ft. from the panel.

The panel shall be an Evax FIRE 1 Series EF3V or equal.

Specifications are subject to change without notice. Specifications are provided for information only and no responsibility is assumed by Evax Systems, Inc. for their use.

How to Order: Standard cabinet color is Red, Grey is optional

- EF3V** FIRE 3 - 1 Loop Addressable Control Panel w/Integrated Voice, 25, 50 or 100 Watt Amplifier, 1 Class A or B Speaker Circuit, Integral UDACT
- EF3V-25** FACP w/ 25 Watt Amplifier, 1 Class A or B Speaker Circuit, 120VAC
- EF3V-25-4Z** FACP w/ 25 W Amplifier, 4 Class B Speaker Circuits, 120VAC
- EF3V-25-8Z** FACP w/ 25 W Amplifier, 8 Class B Speaker Circuits, 120VAC
- EF3V-50** FACP w/ 50 W Amplifier, 1 Class A or B Speaker Circuit, 120VAC
- EF3V-50-4Z** FACP w/ 50 W Amplifier, 4 Class B Speaker Circuits, 120VAC
- EF3V-50-8Z** FACP w/ 50 W Amplifier, 8 Class B Speaker Circuits, 120VAC
- F2V-100** FACP w/ 100 W Amplifier, 1 Class A or B Speaker Circuit, 120VAC
- EF3V-100-4Z** FACP w/ 100 W Amplifier, 4 Class B Speaker Circuits, 120VAC
- EF3V-100-8Z** FACP w/ 100 W Amplifier, 8 Class B Speaker Circuits, 120VAC
- 2ZA** Option for 2 Class A Speaker Circuits
- 4ZA** Option for 4 Class A Speaker Circuits
- G** Option for Grey Cabinet
- 220VAC** Option for 220/240 VAC, 50/60 Hz Operation of Amplifier
- EF1-ANN** Remote LCD/LED Annunciator in Cabinet
- EF1-CM** 10 Class B or 5 Class A Conventional Zone - Board only
- EF1-NTWK** Peer to Peer Network card



EF3V Panel Layout