

FireLarm™ Model 5000 Control Unit

DESCRIPTION

The CPG FireLarm 5000 and FireLarm 5000E fire alarm control unit is designed for commercial, industrial, and industrial automatic, manual, supervisory, local, and remote fire alarm system applications. It offers coded and non-coded operation. The FireLarm 5000 meets today's pressing need for more sophisticated protection in a less expensive package. The broad range of built-in features and completely programmable inputs, outputs, and relays offer the ultimate in flexibility of design and operation.

CONFIGURATION

The FireLarm 5000 alarm control unit offers a 5 zone panel (expandable to 10 zones) in two configurations: Regular (5000) and Plus (5000E).

The FireLarm 5000 offers two Style Y indicating (bell) circuits, one Style D or B initiating loop and four Style B initiating loops. A local sounder with resound and ringback offers distinct audible annunciation of alarm, trouble, and supervisory conditions. The 4-character LED display offers a visual indication of the location and status of operating conditions.

Initiating circuits can be individually programmed for supervisory, waterflow, alarm verification, and auxiliary relay functions. Initiating circuits can be programmed to ring indicating circuit one, two, or both. Any unused initiating circuit power can be turned off to conserve power and eliminate the need for an end-of-line-resistor.

The alarm indicating circuits are individually transient protected and independently silenceable. Indicating circuits can be programmed (by initiating circuit) to annunciate March Time (60 or 102 bps), temporal pattern, pre-alarm notification, or a steady tone.

Two programmable indicating circuits and 3 amps of additional power can be added by using the IPB-3 In-Line Power Booster. Up to 16 IPB-3 power boosters can be networked to each 5000 panel.

Optional auxiliary system relays (AXR) and zone relays (ZRM) provide form C contacts rated at 5 amps. A ten zone annunciator (5000RAN) is also available.

The 5000E offers in addition to the features of the 5000 a clock display, RS232 serial communication capability, and battery backed event log.



FireLarm 5000 CONTROL UNIT

FEATURES

- 5 initiating zones, expandable to 10 zones.
- 2 independently programmable indicating circuits.
- One set of Form C alarm contacts.
- One set of Form C trouble contacts.
- Programmable inputs and outputs.
- Complete system status from the 4-character LED display.
- Distinct audible and visual local annunciation of all conditions.
- One man walk test capability.
- 2 or 4-wire detector compatible.
- Compact enclosure.
- Meets NFPA 71 and 72 requirements.
- UL Listed.

5000E additional features

- Real-time clock.
- 1000+ event log
- RS232 serial communication port.

AVAILABLE OPTIONS

- 5-zone initiating expander module (EMB).
- 5-zone relay module (ZRM).
- Remote relay drivers (RRM).
- Remote annunciator, 10-zone (5000RAN).
- 3A power booster with 2 supervised indicating circuits.



Pending

SPECIFICATIONS

AC POWER

- 120VAC/50/60Hz., 0.32 amps.
- Wire size: 12-20 AWG.
- Built-in brown out circuitry.
- Built-in DC voltmeter.
- Self-resetting circuit breaker.

DC POWER

- 3 amps available for all sources
- Filtered, regulated.

INITIATING CIRCUITS

- 1 Style B or D circuit
- 4 Style B Circuits.
- Monitor normally open or normally closed devices.
- Programmable for standard, waterflow, or supervisory modes.
- Power limited and fully supervised.
- 100 ohms of line resistance.
- 12-22 AWG wiring.

INDICATING CIRCUITS

- 2 Style Y circuits.
- 1.75 amps maximum per circuit.
- Power limited and fully supervised.
- Programmable for steady tone, march time, double march time, temporal code.
- Additional power and indicating circuits available using the IPB-3 Power Booster.

ALARM AND TROUBLE CONTACTS

- One set of Form C alarm contacts.
- One set of Form C trouble contacts.

The FireLarm 5000 fire alarm control unit carries the following listings/approvals:

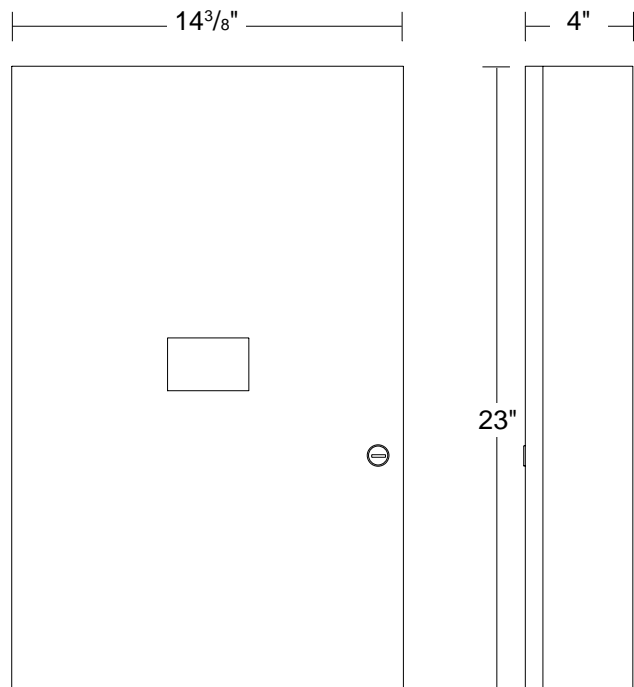
<u>Agency</u>	<u>Reference Number</u>
Underwriter's Laboratories	S4664
California State Fire Marshal	Pending
New York City (BSA/MEA)	Pending



DISPLAY KEYPAD

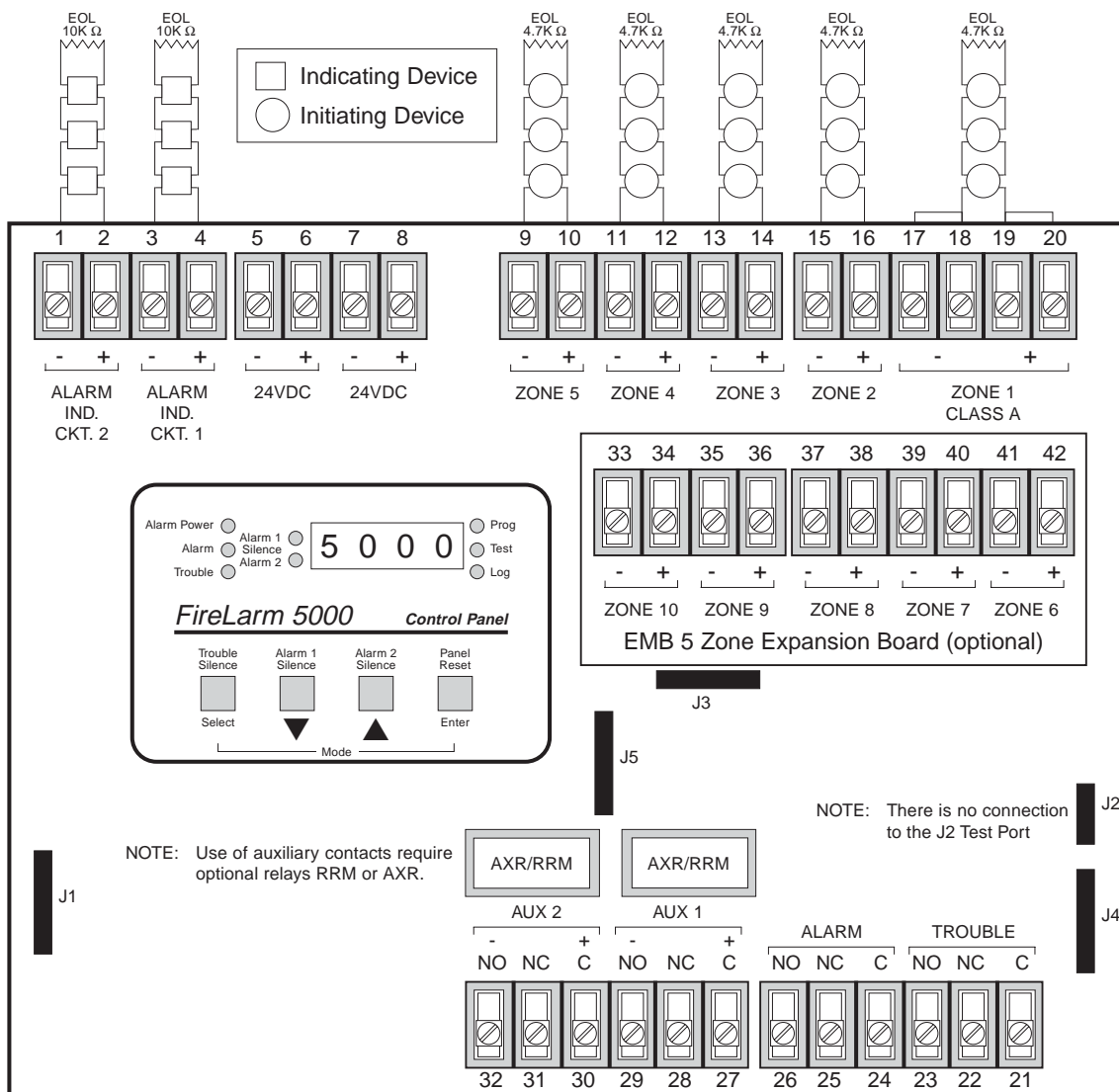


OPTIONAL EMB 5 ZONE EXPANDER MODULE



FireLarm 5000 CABINET DIMENSIONS

FireLarm™ Model 5000 Control Unit



SPECIFICATIONS

The contractor shall provide a complete electrically supervised microprocessor based fire alarm and communications system. The system shall contain a fire alarm control panel to supervise and operate heat and smoke detection devices, alarm signaling devices, visual annunciators, and a digital communicator to transmit fire alarm and supervisory signals to a central station. There shall be up to 10 programmable initiating zones. They shall accommodate heat detectors, manual pull stations, sprinkler flow switches and gate valve supervisory switches intermixed as desired and permitted by NFPA 72. Detection may be either 2- or 4- wire and shall be UL Listed for use with the system. All initiating zones shall be programmable for alarm verification, supervisory or waterflow alarm, and may be mappable to any indicating zone circuit. There shall be 2 supervised alarm indicating circuits. Indicating zones will be programmable by initiating zone for continuous tone, 2 march times, temporal code, or supervisory operation. The panel shall offer distinct and separate audible and visual indication of alarm, trouble, and supervisory conditions. The panel sounder will resound should a subsequent trouble, alarm, or supervisory condition occur. Programming and Display Codes shall be prominently displayed on the interior of the cabinet door. The panel shall offer one person walktest, built in diagnostics, and battery backed event log capabilities. The control shall be equipped with programmable alarm and trouble relays and offer capacity for programmable auxiliary relays with the option of adding two relays per zone. The relays shall maintain contact until cleared. The control shall be capable of supporting a 4 channel digital dialer. The control panel shall be CPG FireLarm 5000 or FireLarm 5000E.

ORDERING INFORMATION

Part Number	Description	Part Number	Description
	FireLarm 5000 Control Panel <i>Consists of:</i> CPU1 Central Processing Unit 5000-CAB Cabinet, Transformer		5000 & 5000E Accessories
	FireLarm 5000E Control Panel Deluxe Includes 1000 event log, clock, RS 232 serial communication port, network connection. <i>Consists of:</i> CPU1+ Central Processing Unit Deluxe 5000E-CAB Cabinet, Transformer	EMB	5 Zone Initiating Expansion Board
		ZRM	5 Zone Relay Module
		RRM	Remote Relay Module
		AXR	Auxiliary Relay
		5000RAN	10 Zone Remote Annunciator.
		5000NIM	Network Interface Module to run 5000RAN Annunciator w/ 5000 panel. (not required for 5000E)
		5000DD	Digital Dialer, 5 Channel
		COMMCABLE	Terminal Cable - 9-pin to 9-pin
		IPB-3	3 Amp In-Line Power Booster
		2561240	Installation & Operation Manual

TECHNICAL SPECIFICATIONS

<p>POWER SUPPLY/CHARGER</p> <table style="width: 100%;"> <tr><td>Nominal AC input voltage</td><td>120VAC/60Hz</td></tr> <tr><td>AC input current</td><td>1 A, maximum</td></tr> <tr><td>Standby battery voltage</td><td>24VDC, rechargeable type</td></tr> <tr><td>Output current</td><td>2.75A, max. (output loads)</td></tr> <tr><td>Battery charge current</td><td>.5A, maximum</td></tr> <tr><td>Battery charge voltage</td><td>27.5VDC, maximum</td></tr> </table> <p>ZONE INITIATING INPUTS</p> <table style="width: 100%;"> <tr><td>Nominal circuit voltage</td><td>22VDC</td></tr> <tr><td>Nominal short circuit current</td><td>40mA</td></tr> <tr><td>Maximum short circuit current</td><td>45mA</td></tr> <tr><td>Current required to insure alarm</td><td>15mA</td></tr> <tr><td>Supervision current</td><td>5mA</td></tr> <tr><td>End-of-line-resistor</td><td>4.7K Ohms</td></tr> <tr><td>Maximum line resistance per side</td><td>50 Ohms</td></tr> <tr><td>Maximum total line resistance per zone</td><td>50 Ohms</td></tr> </table> <p>* each circuit employs transient voltage protection</p> <p>INDICATING OUTPUTS (2)</p> <table style="width: 100%;"> <tr><td>Nominal output voltage</td><td>24VDC filtered/regulated</td></tr> <tr><td>Maximum output current</td><td>1.75A per circuit</td></tr> <tr><td>Supervision current</td><td>.5mA</td></tr> <tr><td>End-of-line resistor</td><td>10K Ohm</td></tr> </table> <p>* each circuit is power limited by electronic circuit breaker and employs transient voltage protection.</p> <p>AUXILIARY 24VDC OUTPUTS</p> <table style="width: 100%;"> <tr><td>Nominal output voltage</td><td>24VDC</td></tr> <tr><td>Maximum output current</td><td>1.75A</td></tr> </table> <p>* power surge limited and power limited by electronic circuit breaker. * Output is optionally resettable under microprocessor control.</p> <p>TROUBLE AND ALARM RELAY OUTPUTS</p> <table style="width: 100%;"> <tr><td>Contact type</td><td>Form C (SPDT)</td></tr> <tr><td>Contact rating</td><td>10A @ 28VDC/120VAC resistive</td></tr> </table>	Nominal AC input voltage	120VAC/60Hz	AC input current	1 A, maximum	Standby battery voltage	24VDC, rechargeable type	Output current	2.75A, max. 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