SILENT KNIGHT
by Honeywell

SK-2 & SK-2E Fire Alarm Control Panel

A flexible, powerful, cost-effective panel for fire protection applications.

The SK-2 and SK-2E (SK-2/E) are two zone conventional fire alarm control panels (FACPs) that bring the latest in microprocessor technology to conventional fire controls. The SK-2 is a 120 VAC FACP and the SK-2E is a 240 VAC FACP. These FACPs provide reliable fire signaling protection for small- to medium-sized commercial, industrial, and institutional buildings.

For more information about the SK-2/E system, or to locate your nearest source, please call 1-800-328-0103.

Description

The two zone SK-2/E is a 24 VDC FACP that provides two Class B initiating device circuits and one Class B notification appliance circuit (NAC).

The SK-2/E NAC protocol includes the ability to silence audible devices while strobes continue to flash, using only a single pair of wires. The SK-2/E is also compatible with conventional input devices such as two- and four-wire smoke detectors, pull stations, waterflow devices, tamper switches and other normally-open contact devices.

Activation of a compatible smoke detector or any normally-open fire alarm initiating device activates audible and visual signaling devices, illuminates an indicating LED, sounds the piezo sounder at the FACP, activates the FACP alarm relay, and operates an optional module used to notify a remote station or initiate an auxiliary control function.

The SK-2/E is compatible with System Sensor® I^3 detectors providing advanced features such as drift compensation, maintenance alert, and freeze warning. Automatic synchronization of audio/visual devices is provided, using three selections for manufacturer protocol.

Features

- Two Style B (Class B) initiating device circuits (IDCs)
- One Style Y (Class B) notification appliance circuit (NAC)
- Support for synchronization of standard ANSI audible signals and ADA compliant strobes per NFPA 72

- Selectable for System Sensor, Wheelock, and Gentex protocols
- Selective silence feature allows manual silence of horns while strobes continue to flash on the same NAC
- Silent or audible walk test operation mode
- Alarm verification selectable per zone
- Program each zone for supervisory or fire with separate red and yellow LEDs
- Disable switches provided per zone
- Program NACS for
  – Silence inhibit
  – Auto silence
  – Strobe synchronization
  – Temporal or steady signal
  – Silenceable or nonsilenceable
  – Disable
- Form C alarm and trouble relays
- 3A total usable current
- Optional dress panel (PN SK-DP2/4)

Electrical Specifications

SK-2 Primary AC: 120 VAC @ 50/60 Hz, 2.3A

SK-2E Primary AC: 240 VAC @ 50 Hz, 1.15A

Wiring: 14 AWG (2.0 mm^2) with 600 V insulation min

Initiating Device Circuits (IDCs)
Operating Voltage: 22 VDC nominal; power-limited
Standby Current: 4 mA
Alarm Current: 15 mA min
Short-circuit Current: 40 mA max
Loop Resistance: 100 max
EOL Resistor: 4.7K , 1/2 watt

SK-2

NACs
2.5A @ 24 VDC with standard transformer, power-limited
Signaling Current: 2.5A max with standard transformer
EOL Resistor: 4.7K , 1/2 watt

Form C Relays
Types: Trouble and alarm
Contact Ratings: 2A @ 30 VAC, resistive

Auxiliary Output
Resettable
Operating Voltage: 24 VDC nominal
Current: 500 mA max, power-limited

SK-2 & SK-2E
Fire Control Panel

Engineering Specifications

The contractor shall provide a completely electrically supervised fire alarm control panel Silent Knight Model SK-2/E. The system shall contain a fire alarm control panel capable of operating and supervising smoke detection devices, alarm notification devices, and an on-board annunciator. It shall be compatible with a digital communicator accessory.

The fire alarm control panel shall have a power limited supply, two Class B initiation circuits which shall accommodate heat detectors, smoke detectors, and manual pull stations. Smoke detection shall be achieved with either 2- or 4-wire detectors that are compatible with the system. The initiation inputs shall be programmable as 1) verification zones in which detectors are automatically reset one time before signaling an alarm condition; or 2) combination waterflow supervisory zones that allows the FACP to distinguish between an alarm switch (waterflow device) and a supervisory switch (tamper) installed on the same circuit. The FACP shall have one 2.5 amp programmable notification output. It shall have dedicated relays for alarm and trouble and a resettable power output rated at 500 mA.

The FACP shall have an on-board annunciator to indicate alarm, supervisory, trouble, and maintenance conditions. The annunciator must include LEDs for AC, GENERAL TROUBLE, ALARM SILENCE, WALK TEST, EARTH FAULT, AND LOW BATTERY. The annunciator shall also contain LEDs to annunciate fire alarms, troubles, supervisory, and maintenance by zone. The FACP must be fully operational from the annunciator and include buttons for ACKNOWLEDGE, ALARM, SILENCE, RESET, and WALK TEST. The annunciator must also have separate DISABLE switches for each zone and notification circuit.

Electrical Specifications (cont)
Battery
Type: Sealed lead acid only
Charging Circuit: 27.6 VDC @ 0.8A max normal flat charge
Charging Capacity: 7 AH
Size: 18 AH max allowed in FACP. Larger batteries can housed in an RBB accessory cabinet

Compatible Initiating and NAC Devices
See SK document PN 52612.

Mechanical Specifications
Cabinet Backbox Dimensions:
14.5" W x 15" H x 3" D
(36.83 W x 38.10 H x 7.62 D cm)

Cabinet Door:
14.677" W x 15.342" H x 0.375" D
(37.28 W x 38.97 H x 0.95 D cm)

Cabinet Color: Red

Telephone Requirements:
FCC Part 15 and Part 68 approved
Type of Jack: RJ31X (two required)

Installation
The SK-2/E can be surface mounted using two key slots at the top of the backbox and two additional 0.25" diameter holes at the bottom, or semi-flush mounted using optional Trim Ring P/N TR-1-R

Approvals
NFPA 72; UL Listed;
CSFM 7165-0559: 145;
MEA 297-01-E-3

Ordering Information
SK-2
120 VAC Two Zone Conventional FACP

SK-2E
240 VAC Two Zone Conventional FACP

Accessories
SK-DP2/4
Dress Panel. Allows access to the panel controls but restricts access to system wiring.

SK-4XTM
Transmitter Module. Provides a supervised output for local energy municipal box transmitter and alarm and trouble reverse polarity.

RBB
Remote Battery Box Accessory Cabinet. Use if back up batteries are too large to fit into FACP cabinet. Dimensions: 16"W x 10"H x 6"D (406 mm W x 254 mm H x 152 mm D)

Digital Communicator Accessories
5104B
Six-Zone fire control communicator

5129
Four channel slave fire communicator

SILENT KNIGHT
by Honeywell

MADE IN AMERICA