

## FEATURES

- *Factory Mutual Approved for Off Road Vehicles*
- *-40°F (-40°C) to 158°F (70°C) Operating Range*
- *IP66/NEMA4X Enclosure*
- *12/24Vdc or Independent Power Supply Service*
- *Flexible Field Configuration*
- *Integral Multi-Tone Buzzer*
- *Quick Connect Wiring Connectors*
- *Supervised Field Wiring*
- *CE Approved*

## DESCRIPTION

The Kidde Fire Systems SA1 panel provides a rugged compact solution ideally suited for small to medium sized vehicle suppression systems. Fitting the electric operated protractor to either a remote system actuator or second shot actuator, allows scaling up the SA1 to support even larger complex suppression systems.

The SA1 panel supports automatic suppression release when interfacing with a compatible detector (heat or flame). The release circuit actuates up to three protractors and may be configured to delay discharge in 15-sec increments from zero (immediately upon alarm) to 60 seconds. The SA1 can configure the release circuit to allow or prevent an operator override. When enabled to allow an override, the operator may delay the actuation three times. After the third override, the SA1 will ignore any additional override commands and actuate the protractor at the end of the set delay period.

In addition to the above automatic release, the SA1 may be configured for either electric or pneumatic (pressure) manual release. When configured for electric manual release, the protractors will be actuated after the vehicle operator engages the separate electric manual release button wired to the SA1. When configured for pneumatic release, the protractors will not actuate and the suppression system will require outfitting with either the remote system actuator or the mechanical actuator.

For either automatic or manual actuation, the SA1's alarm relay, rated to 30Vdc @ 2A, may be used to shut down the vehicle. Upon an automatic alarm, the relay can be set to either match the delay duration set for the release circuit or to a shorter delay duration. Upon a manual release alarm, the relay can be set to 0, 15 or 30-sec of delay duration. Once energized, the relay remains latched until the panel is reset. When configured for pneumatic manual release, the alarm relay will only energize when outfitting the system with the actuation monitor switch.

The SA1 also includes a supervisory circuit, which may be used with any contact closure type device as may be desired.



Figure 1. Kidde Sentinel SA1

Other than the alarm relay circuit, the SA1 will supervise all other circuits noted above.

The SA1 will annunciate alarms, discharge, troubles and supervision with an integral LED suite and multi-tone buzzer.

Power to the SA1 may be provided either from the vehicle battery (12/24Vdc) via a Power Supply Board or from the Primary Cell, which provides one year of stand-by power when using non-powered detectors. Either component shall be ordered separately. When using a Power Supply Board, an optional battery may be installed to provide a maximum of one hour of stand-by power after powering down the vehicle. The SA1 will supervise the Power Supply Board and the charge on the optional battery.

The SA1 includes a splitter cable harness and corresponding end of line devices and shorting plugs.

For convenience, Kidde offers separately ordered cable harnesses for each above noted circuit as an alternative to field fabrication.

## TECHNICAL SPECIFICATIONS

Description	Specification
Part Number:	83-132400-000
Weight:	2.5 lb.
<b>Input Power Requirements:</b>	
Input Voltage:	9-32 VDC (Range) 12 VDC or 24 VDC (Nominal)
Input Current:	325mA (max)
<b>Environmental Characteristics:</b>	
Operating Temperature:	-40°F to 158°F (-40°C to 70°C)
Enclosure Rating:	NEMA 4X/IP66

## REFERENCED COMPONENTS

Description	Reference Data Sheet
Bracket	K-83-212
Primary Cell	K-83-235
Power Supply Board	K-83-236
Battery, Optional One Hour Stand-By	K-83-237
Cable Harness, Optional Distribution	K-83-241
Cable Harness, Detection	K-83-243
Cable Harness, Input/Output (I/O)	K-83-244
Cable Harness, Power	K-83-240
Cable Harness, Relay	K-83-245
Detector, Infra-Red	K-83-112
Detector, Linear Heat Sensor	K-83-251
Detector, Detect-A-Fire (DAF)	K-83-252
Manual Release, Electric	K-83-260
Protractor	K-83-261
Switch, Actuation Monitor	K-83-270
Switch, Maintenance By-Pass	K-83-205
Switch, Key Maintenance	K-83-200

### EXPORT INFORMATION (USA)

Jurisdiction: EAR  
Classification: EAR99

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