

Fire detection and evacuation solutions that save lives.

Single Input Device

Features

- Loop Powered
- Monitored Input
- Compatible with XP95 & Discovery Protocol
- Built In Short Circuit Isolator
- Low Power Consumption
- Diagnostic LED Indications
- Surface Mount Enclosure
- DIN Rail Mount Option

Description

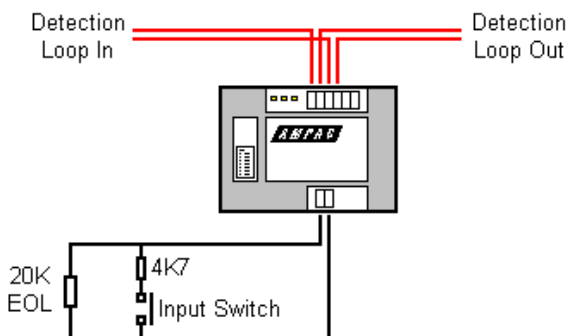
The Single Input Device is designed to monitor the state of one or more single pole, voltage free contacts connected to a single pair of cables and to report the status to the Ampac fire detection control panel.

Monitoring of the external cables is provided for open and short circuit fault conditions and the input circuit itself is conditioned with de-bounce circuitry for enhanced noise rejection. The input circuit is also protected against high transient voltages.

The Ampac Single Input Device is loop powered and incorporates bi directional isolation circuitry to provide protection against detection loop short circuits. On board LED status indication is provided for service and commissioning purposes, a feature that can be deactivated during normal operation to reduce the current draw on the system.

Two packaging options are available. The 'DIN Mount' version enables the device to be mounted onto standard 35mm DIN rail or screwed direct to the back pan of a larger enclosure while the 'Enclosed' version allows the device to be surface mounted to a wall.

Schematic



Enclosed version

Applications

- Fire Fans and Dampers
- Pump Status
- Sprinkler Systems
- Beam Detection
- Aspirating Systems
- HVAC Systems
- Tank Status
- Valve Monitoring

Specifications

Operating Voltage	17 - 28V DC	
Max Current at 24V DC	LEDs Enabled	LEDs Disabled
Quiescent Current	1.84mA	1.29mA
Input On	2.68mA	1.51mA
Operating Temp.	-20°C +70°C	
Humidity	0 to 95% Non-condensing	
Dimensions	(H x W x D)	
DIN Mount	75mm x 110mm x 25mm	
Enclosed	150mm x 200mm x 52mm	
Enclosure (4210-0053)	4 Side 4 Rear	
Cable Entry	Conduit knock outs Top Bottom	
Material	Grey ABS	
IP Rating	IP44	

Item Numbers

4210-0052	Single Input Device DIN Mount
4210-0053	Single Input Device Enclosed

Fire detection and evacuation solutions that save lives.

Single Input Device

Short Circuit Isolator Specification

Maximum line voltage - V_{\max}	28V dc
Minimum line voltage - V_{\min}	17V dc
Maximum voltage device isolates - $V_{SO \max}$	16V dc
Minimum voltage device isolates - $V_{SO \min}$	12V dc
Maximum voltage device reconnects - $V_{SC \max}$	17V dc
Minimum voltage device reconnects - $V_{SC \min}$	12V dc
Maximum rated current - $I_{C \max}$	1 A
Maximum rated switching current - $I_{S \max}$	3.3 A
Maximum leakage current - $I_{L \max}$	60 mA
Maximum series impedance switch closed - $Z_{C \max}$	100 m Ω