

Fire detection and evacuation solutions that save lives.

Three Input Output Device

Features

- 3 x Independent Monitored Inputs
- 3 x Change Over Relay Outputs
- Loop Powered inc Short Circuit Isolator
- Compatible with XP95 & Discovery Protocol
- Low Power Consumption
- Diagnostic LED Indications
- Surface and DIN Mount Enclosures

Description

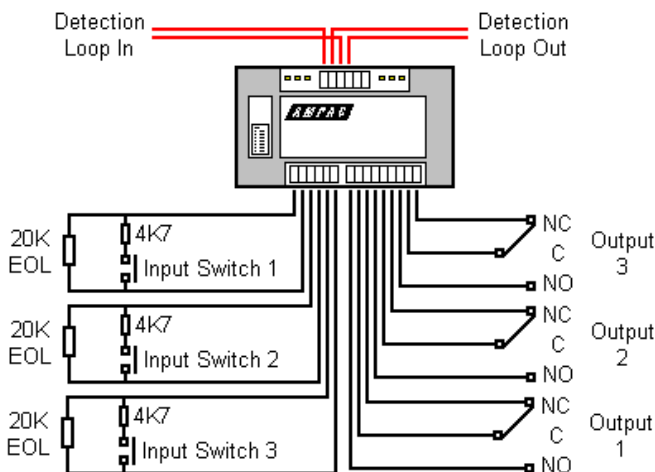
The Ampac Three Input Output Device is designed to interface to a variety of plant control equipment such as door contacts, sprinkler flow switches, gas valves and fire fan control systems.

The Three Input Output Device incorporates three (3) single pole, voltage free change over relay contacts and three (3) monitored switch inputs. Each input can be used to supervise one or more normally open contacts connected to a single pair of cables with monitoring provided for both open and short circuit fault conditions. The Input circuits incorporate de-bounce circuitry for enhanced noise rejection and are protected against high transient voltages.

The Ampac Three Input Output Device is loop powered and includes bi directional isolation circuitry for 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



Applications

- HVAC/BMS Signals
- Aspirating Systems
- Lifts and Door Contacts
- Beam & Flame Status

Specifications

Operating Voltage	17 - 28V DC	
Max Current at 24V DC	LEDs Enabled	LEDs Disabled
Quiescent Current	1.87mA	1.31mA
1 Input On	2.56mA	1.47mA
2 Inputs On	2.93mA	1.51mA
3 Inputs On	3.26mA	1.54mA
Output 1 On	2.62mA	1.40mA
Output 2 On	3.36mA	1.40mA
Output 3 On	4.10mA	1.40mA
Total	6.01mA	1.59mA
Output Contact Rating	1A at 30V AC or DC	
Operating Temp.	-20°C +70°C	
Humidity	0 to 95% Non-condensing	
Dimensions	(H x W x D)	
DIN Mount	75mm x 144mm x 25mm	
Enclosed	150mm x 200mm x 52mm	
Enclosure (4210-0055)		
Cable Entry	4 Side 4 Rear	
	Conduit knock outs Top Bottom	
Material	Grey ABS	
IP Rating	IP44	

Item Numbers

4210-0054	Three Input Output Device DIN Mount
4210-0055	Three Input Output Device Enclosed

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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