

- 2 x Monitored Detection Zones
- 2 x Monitored Inputs
- 2 x Monitored Alarm Outputs
- 2 x Volt Free Changeover Contacts
- Auxiliary 24vDC Powered
- **DIN Rail Mounted**
- Integral Short Circuit Isolator
- Protec Algo-Tec 6000 Protocol

## 6000/410 Auxiliary Powered 4 Way Zone Alarm I/O Interface



**Wiring Diagram** 

The Protec 4 way input/output interface is a auxiliary powered input / output device providing 2 local zones of conventional detectors, 2 monitored inputs, 2 local monitored alarm outputs and two volt free changeover contacts. The contacts may be used to connect to ancillary equipment.

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### ADDRESSING SAFETY SYSTEMS WITH INTELLIGENCE

## **Technical Specification**

#### Loop protocol

Loop protocol	Protec Algo-tec™ 6000 MX1
Loop isolator fitted	Yes, on board (consult Protec DEL2110 for details)
Loop voltage range	18 to 28V peak loop
Number of loop addresses used	4 maximum, user and build configurable
24V Auxiliary input voltage range	18 to 28V dc
Environmental operational limits	-10 to 50°C (maximum 95% RH no condensation or icing)
Loop quiescent current (24V loop peak)	0.6mA
Loop alarm current (average)	0.6mA
Zone short circuit current (24V)	26mA peak ± 2mA
Zone end of line requirements (I/P 1 & I/P 2)	Resistive - 8.2k $\pm 5\%$ ¼W, Capacitive - 100 $\mu$ F $\pm 20\%$ in series with 22 $\Omega$ $\pm 5\%$ ¼W
Input cabling requirements	Maximum cable resistance 6 $\Omega$ per conductor Maximum cable capacitance 0.2 $\mu$ F between cable conductors
Zone quiescent current	$500 \mu$ A maximum ( 10 Protec 3000 detectors per zone )
Zone reset time	2 seconds, with active zone discharge
Manual Call Point requirements	Must be fitted with a series 330 $\Omega$ or 180 $\Omega$ resistor
Zone short circuit threshold	Below 5% of supply voltage
Zone fire threshold	Below 70% of supply voltage

Zone resistive open circuit threshold Monitored input end of line details Monitored input short circuit threshold Monitored input fire threshold Monitored input pre-alarm threshold Monitored input open circuit threshold Sounders supported Sounder circuit end of line Sounder circuit cable requirements

Sounder short circuit fault threshold Sounder open circuit fault threshold Sounder current limit (maximum) Sounder circuit fuses **Clean contact output details** 

Weight **LED Indicator** 

Below 230Ω Below 7.85kΩ Below  $32k\Omega$  (Input 3 only) Above 111kΩ Protec 3000 series 10kΩ ¼W ±5% Maximum cable resistance depends on Volt drop calculations Maximum cable capacitance 0.1 F between cable conductors. Below 2kΩ

Above 18kQ

1.6A

20mm x 5mm 1.6A Quick Blow

Above 92% of supply voltage

End of line resistor value  $47k\Omega \ 1/4W \pm 5\%$ 

1 Single pole changeover rated for 2A maximum at 24V dc ( non inductive ) 1 Single pole changeover rated for 5A maximum at 230V ac ( non inductive )

245g (including din rail housing, no backbox, 4 way build )

Use only high brightness LED (Protec stock code: NK 02-676-46)

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