

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

- 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



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.

Wiring Diagram Extremal Loop IN EXTERNAL LOOP

Technical Specification

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) 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 - 100μ F $\pm 20\%$ in series with 22Ω $\pm 5\%$ ¼W

Input cabling requirements Maximum cable resistance 6Ω per conductor

Maximum cable capacitance 0.2µ F between cable conductors

Zone quiescent current 500µ 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 330Ω or 180Ω resistor

Zone short circuit threshold Below 5% of supply voltage Zone fire threshold Below 70% of supply voltage

Zone resistive open circuit threshold Above 92% of supply voltage

Monitored input end of line details End of line resistor value $47k\Omega$ 1/4W ±5%

Below 230Ω Monitored input short circuit threshold Below 7.85kΩ Monitored input fire threshold

Below $32k\Omega$ (Input 3 only) Monitored input pre-alarm threshold

Monitored input open circuit threshold Above 111kΩ Sounders supported Protec 3000 series Sounder circuit end of line 10kΩ ¼W ±5%

Maximum cable resistance depends on Volt drop calculations Sounder circuit cable requirements

Maximum cable capacitance 0.1 F between cable conductors.

Sounder short circuit fault threshold Below 2kΩ Above 18kΩ Sounder open circuit fault threshold

Sounder current limit (maximum) 1.6A

Sounder circuit fuses 20mm x 5mm 1.6A Quick Blow

Clean contact output details 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)

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

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