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ISO 9001: 2008

International Standards
Certifications
QAC/R64/0012

Product Overview:

Pertronic Industries **F4-3 2W** is a four-zone 2-Wire Fire Alarm control unit designed for low cost, Housing NZ Fire Alarm systems.

The **F4-3 2W** is modified to meet Housing NZ requirements for small residential applications and meets most requirements of NZS 4512:2010.

The **F4-3 2W** supports Pertronic Indicating Manual Call-Points, Indicating Heat Detectors, PS1 sounders and System Sensor Smoke Detectors with the facility to internally mount one or two 20W Evacuation amplifiers.

Standard Features:

- ▶ 'Normal', 'Defect' and per circuit 'Fire' indication on front panel
- ▶ 'Internal Bell Cut-Off' and 'External Bell Cut-Off' (BCO)
- ▶ Alarm reset available from a front panel key-switch
- ▶ Trial Evacuation key-switch
- ▶ Local or remote Hush button option temporarily silences sounders for 2 minutes
- ▶ Detectors are automatically reset at end of the Hush period
- ▶ Combined Detector and Sounder Circuit: monitored with a 10kΩ EOL resistor
- ▶ The combined Sounder and Detector circuit support a mix of System Sensor 2WTA-B Smoke/Thermal Detectors with in-built sounder, System Sensor 1151, 2151 Smoke detectors, Pertronic indicating Heat Detectors and indicating Manual Call-Points and Pertronic PS1 sounders and strobes
- ▶ Fire & Defect C/O relays with Fire relay Isolate switch
- ▶ Automatic Alarm Verification Facility (AVF) provides substantial protection against transient false alarm activation
- ▶ Monitored Bell circuit with up two (2) 100VRMS line amplifiers with voiced Evacuation message
- ▶ 'Battery Absent' detection circuitry
- ▶ Earth Leakage monitoring
- ▶ Integrated piezo alarm and 'Piezo on Defect' warning
- ▶ System 'Defect' LED indicates source of fault
- ▶ Door Interlock
- ▶ Brigade 'Isolate' and 'Test' switches
- ▶ Electrically isolated interface to an alarm transmitter (SGD)
- ▶ 'Bell Only' configuration available (on Circuit 4) to monitor DBA

Detector Circuits

- ▶ Four (4) zones terminated with 10kΩ EOL resistors
- ▶ Accepts a mix of Smoke Detectors, indicating Heat Detectors and indicating Manual Call-Points
- ▶ Smoke detectors operate after a 1 second Alarm Verification Facility (AVF) delay
- ▶ Indicating Heat detectors and indicating Manual Call-Points give instantaneous (< 0.5 sec) response
- ▶ Zone circuit self-test on start-up and every 24 hours
- ▶ Up to 40 System Sensor Series 100 detectors, fitted to B401R relay bases, may be connected to each zone circuit with up to five (5) **Pertronic** indicating Heat Detectors and indicating Manual Call-Points

Sounder Circuit

- ▶ Bell circuit Relay: 12Vdc, 5A. - monitored with a 10kΩ EOL resistance
 - ▶ Recommended Sounders: 2WTA-B Detector-Sounder or Pertronic PS1 Sounder
- ▶ Alternative Sounder : one or two Pertronic EVAC20W12V Amplifiers
 - ▶ Recommended Speakers : Pertronic PSSB401 Speaker Bases and/or Pertronic PSS1 Speakers

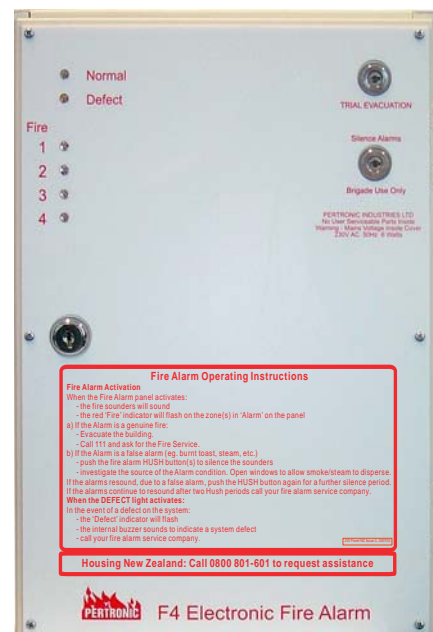
Optional Features:

- ▶ Front or Rear Service cabinet
- ▶ Compatible with Pertronic SGD7 or SGD8 for Fire Brigade connection

Specifications

Electrical:	Power Supply 230Vac, 50Hz, 5W 13.7Vdc, 275mA.	Quiescent Current 28mA at 12Vdc	Defect Current 30mA at 12Vdc	Alarm Current 135mA at 12Vdc - plus Sounder load
Battery	Battery Charger Integral Float Charger 13.7Vdc, 250mA		Battery Type Sealed lead acid (gelcell) 12Vdc, 7AHr - internally mounted	
Environmental:	Operating Temperature Range 0 to +40 °C		Humidity 10 to 95% RH (non-condensing)	
Mechanical:	Dimensions (H x W x D mm) 350 x 245 x 80	Weight 2.2Kg - excluding battery	Material 1.2mm mild steel, powder coated	Colour Beige - other colours optional

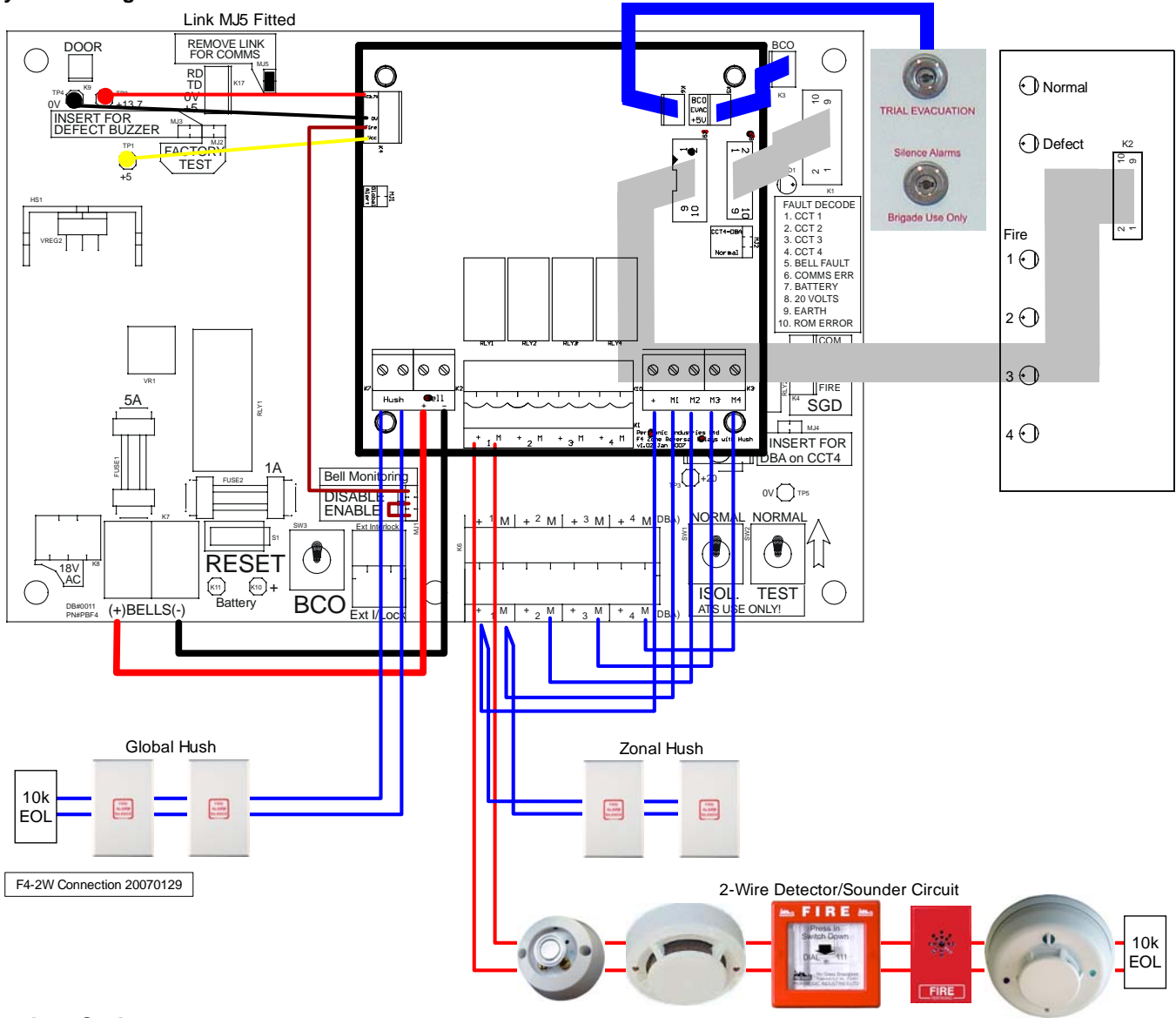
- ▶ Power Supply Timer: Automatic 24-Hour load test with automatic 'Battery Absent' detection circuitry.



Benefits:

1. The **F4-3 2W** and its detectors provide a cost effective solution for residential applications.
2. Installation is made simple as the detectors and sounders are wired on the same pair of cables.
3. The sounders and detectors are fully monitored for open and short circuits.
4. Long battery standby period of up to 7 days.
5. The detectors (2WTA-B) have two detection elements (Smoke / Thermal) with built in sounder.
6. Reduced false alarms due to environmental conditions. The 2WTA-B detector sensitivity is automatically adjusted to compensate for contamination caused by environmental conditions such as dust and dirt.
7. Optional Local or remote Hush button facility enables sounders to be silenced for 3 minutes allowing investigation of alarm.
8. Hush facility may be operated globally and/or per zone
9. Detectors automatically resets at end of the Hush period.
10. Panel Silence and Evacuate facility.

System Wiring:



Product Codes

NZS Code	Description
F4RS-3 2W	F4 RS Panel with 4-Zone Reversal Relay board
F4FS-3 2W	F4 FS Panel with 4-Zone Reversal Relay board
F4-2W	F4-2W board
2WTA-B	2W-B, 2 Wire PE I3 Detector + Thermal and Sounder
1151	1151 Low Pro Ion Detector excl Base
2151	2151 Low Pro Photo Detector excl Base
B401R	B401R 2-wire base with current limiting resistor.

NZS Code	Description
EVAC20W12V	Evacuation Amplifier 20W, 12V, NZS4512:2010
PSS1-R	Pertronic Sounder Speaker 1W Flush Red
PS1-R	Pertronic Sounder AS2220 Flush- Red
SR	SpectrAlert Advance 2 Wire Strobe 12/24V
AMRH	Remote Hush Unit
IHDB-3	Indicating Heat Detector, Blue (57°C)
CPPIN-3	Conventional Indicating Call-Point

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