



F1-3

Single Zone Conventional Fire Alarm Panel

(NZS 4512:2003)

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ISO 9001: 2000

International Standards
Certifications
QAC/R61/0051

Product Overview:

Pertronic Industries **Pertronic F1-3** is a low cost, single zone electronic Fire Alarm system for applications where brigade connection is not a requirement.

The **F1-3** complies with the New Zealand Fire Alarm Standard (NZS 4512:2003) for single zone Fire Alarm systems and with the requirements of the New Zealand Building Code for Type 1 systems.

The **F1-3** supports Smoke Detectors, indicating Manual Call-Points and indicating Heat Detectors with the facility to internally mount a 20W Evacuation amplifier.

Features:

- 'Normal', 'Defect' and '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.
- Alarm Verification Facility (AVF) provides substantial protection against transient false alarm activation.
- Monitored Bell circuit.
- Optional 100V line amplifier with voiced Evacuation message.
- 'Battery Absent' detection circuitry.
- Earth Leakage monitoring.
- Integrated piezo alarm and 'Piezo on Defect' warning.
- On-board System 'Defect' LED indicates source of fault
- Door Interlock.
- Front Service cabinet.

Detector Circuit:

- 1 monitored zone, terminated with a 10kΩ EOL resistor.
- Accepts a mix of Smoke Detectors, indicating Heat Detectors and indicating Manual Call-Points.
- Smoke detectors operate after a 1 second delay
- Indicating Heat detectors and indicating Manual Call-Points give instantaneous (less than 0.5 sec) response.
- Zone circuit self-test on start-up and every 24 hours.

Specifications:

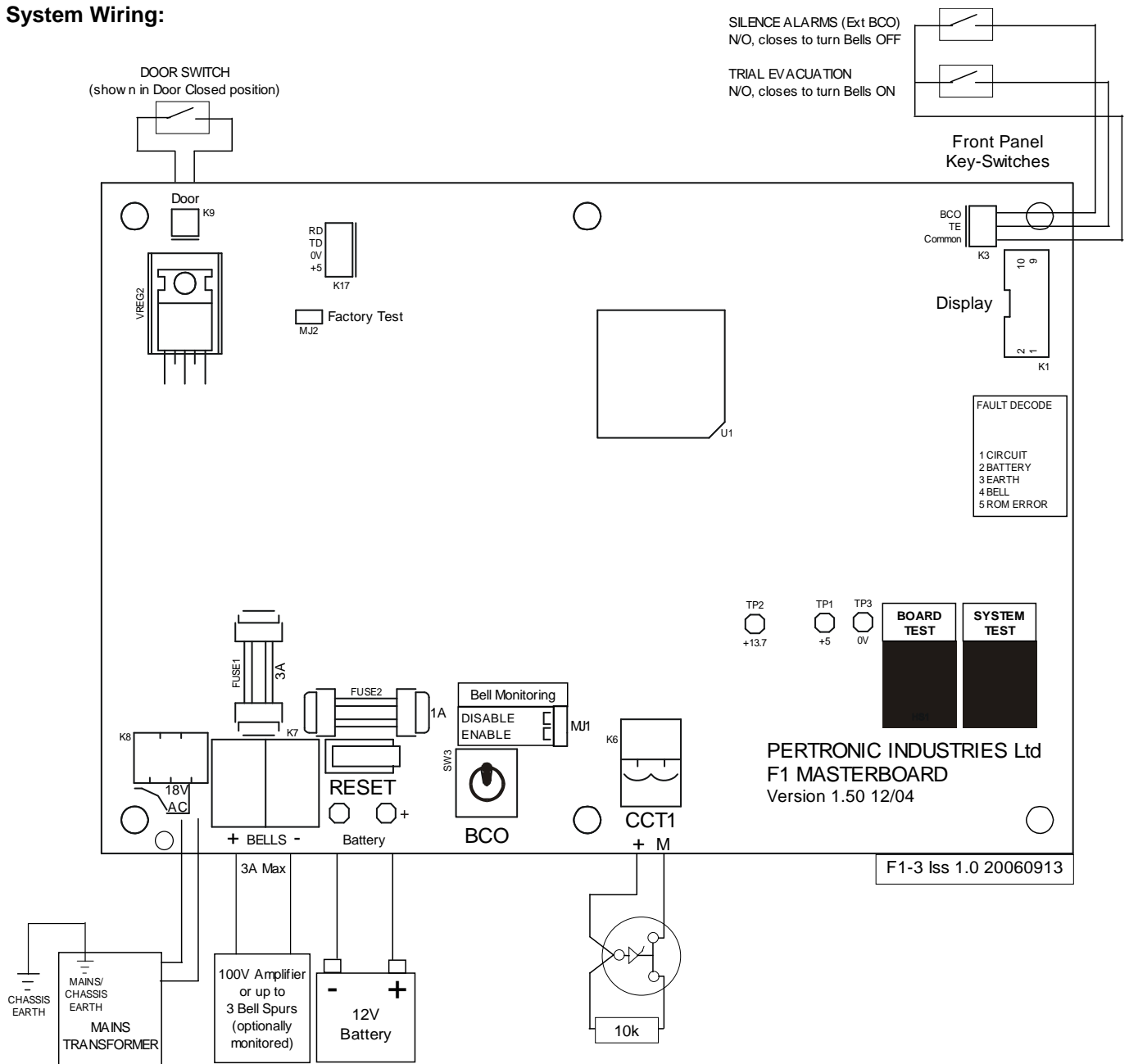
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|--|--|---------------------------------------|---------------------------|
| ➤ Cabinet: | Dimensions | 350 x 245 x 80 | H x W x D mm |
| | Weight | 2.2Kg | - excluding battery. |
| | Material | 1.2mm mild steel, powder coated beige | (other colours optional). |
| ➤ Power Supply: | | 230Vac, 50Hz, 5W | 13.7Vdc, 275mA |
| ➤ DC current consumption: Mains OFF | | | |
| | Normal: | 10mA | |
| | Defect: | 13mA | |
| | Alarm: | 87mA | - plus sounder load. |
| ➤ Battery Type: | Sealed lead acid | 12Vdc, 7Ah | - internally mounted. |
| ➤ Charger: | Integral float charger | 13.7Vdc, 250mA. | |
| ➤ Power Supply Timer: | Automatic 24-Hour load test with automatic 'Battery Absent' detection circuitry. | | |
| ➤ Single (1) zone terminated with a 10kΩ End-of-Line (EOL) resistor. | | | |
| ➤ Alarm triggered by smoke detector operation with 1-second alarm verification (AVF) or instantaneous operation for indicating Heat detector or indicating Manual Call-Point. | | | |
| ➤ Up to 25 System Sensor Series 100 or Series 300 detectors may be connected to the zone circuit in addition to an unlimited number of Pertronic indicating Heat detectors and indicating Manual Call-Points. | | | |
| ➤ Bell Relay: | 12Vdc, 3A. | | |
| | Bell circuit monitored with a 10kΩ EOL resistor. | | |
| | Recommended sounder: | | |
| | ➤ Pertronic EVAC20W12V 100V Amplifier | | |
| | ➤ Pertronic PSSB401 Speaker Bases | | |
| | ➤ Pertronic PSS1 Speakers. | | |

Important Note:

A hard short-circuit or open-circuit produces a 'Defect' signal. Non-indicating Heat Detectors and Manual Call-Points will NOT produce a 'Fire' signal when triggered and MUST NOT be used with the NZS4512:2003 standard **F1-3** panel.



System Wiring:



Product Codes:

Description	NZS 4512:2003 Code
F1, 1cct fire panel NZS4512:2003	F1-3
F1, 1cct Panel with 20W Evac Amp NZS4512:2003	F1-3EA
PIC Microprocessor, PIC16F874A-I/L, PLCC44LD	M16F874A-I/L
Evacuation Amplifier, 20W 12V	EVAC20W12V
Pertronic Speaker and B401 Base	PSSB401
Surface Mount for B401 and B501 Base	SMK400
Pertronic Sounder Speaker 1W, 100V ; Red	PSS1-R
Pertronic Sounder Speaker 1W, 100V ; White	PSS1-W

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