



F1

Single Zone Conventional Fire Alarm Panel

(NZS 4512:2003)

Head Office

Wellington

PO Box 35-063

Naenae

17 Eastern Hutt Rd

Wingate

Lower Hutt

Tel (04) 567-3229

Fax (04) 567-3644

www.pertronic.co.nz

sales@pertronic.co.nz

Auckland Office

PO Box 15-867

New Lynn

119 Lansford Cres

Avondale

Auckland

Tel (09) 820-8228

Fax (09) 820-8284



ISO 9001: 2000

International Standards
Certifications
QAC/R61/0051

Product Overview:

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

The **F1** 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** supports indicating Manual Call-Points, indicating Heat Detectors and Smoke Detectors.

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:

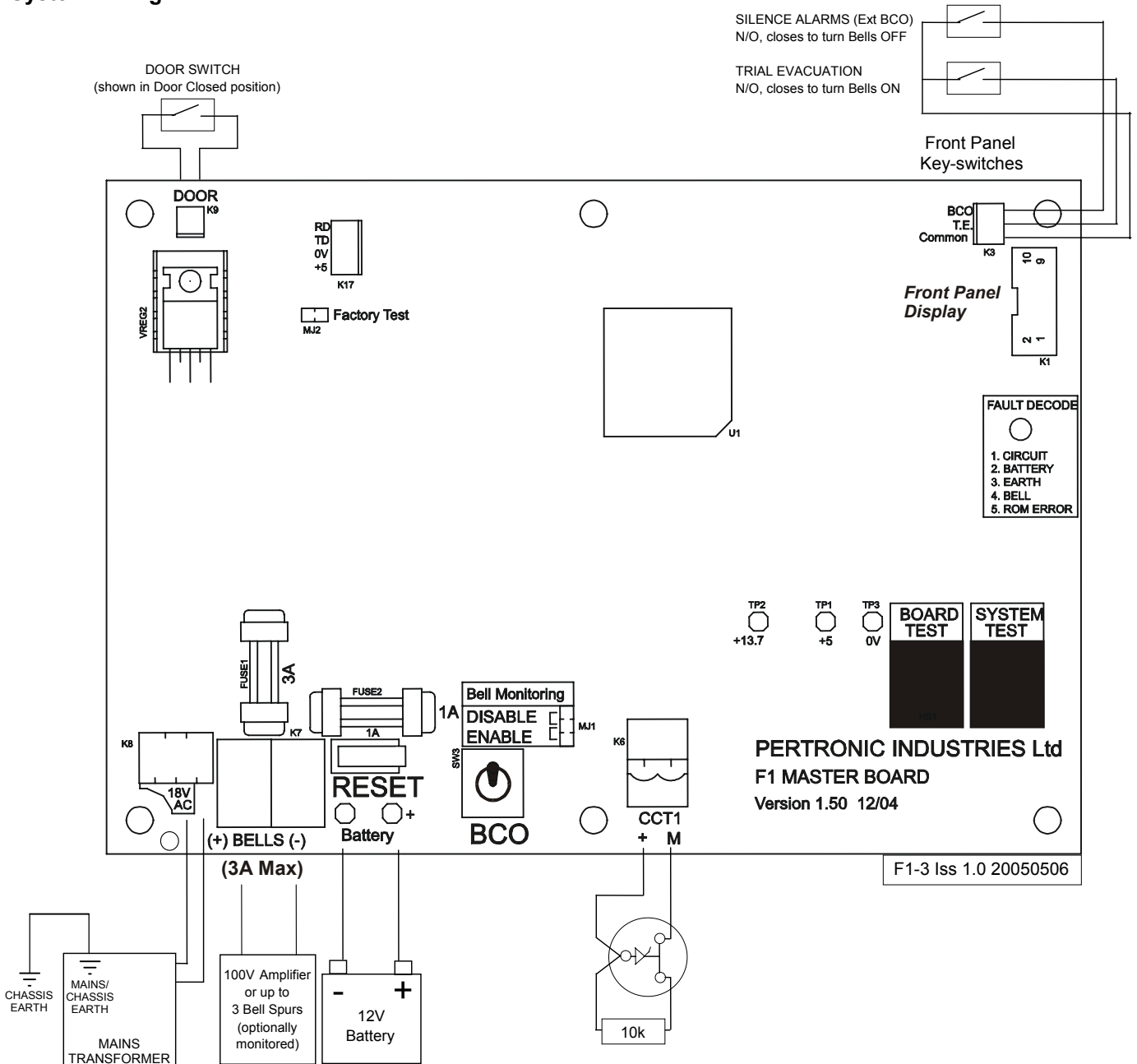
- Cabinet: Dimensions 305H x 215W x 80D (mm).
- Weight 2.2Kg - excluding battery.
- Material 1.2mm mild steel, powder coated beige (other colours optional).
- Power Supply: 230Vac, 50Hz, 5W. 13.7Vdc, 275mA
- DC current consumption: Mains OFF
 - Normal: 10mA
 - Defect: 13mA
 - Alarm: 87mA - plus sounder 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 each 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** PSS1 Speakers or PSSB401Detector Base 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** panel.



System Wiring:



Product Codes:

Description	NZS 4512:2003 Code
Single Zone Front Service Fire Alarm Control Unit	F1-3
PIC Microprocessor, PIC16F874A-I/L, PLCC44LD	M16F874A-I/L
EVAC 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 ; Red, 10 Pack	PSS1-R10
Pertronic Sounder Speaker 1W, 100V ; White	PSS1-W
Pertronic Sounder Speaker 1W, 100V ; White, 10 Pack	PSS1-W10

PERTRONIC INDUSTRIES LTD

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techsupport@pertronic.co.nz

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