F4-3 Conventional Fire Alarm Control Panel

Overview

The Pertronic F4-3 is a fire alarm control panel with four conventional detection zone circuits.

The F4-3 supports Pertronic indicating manual call points (MCP), Pertronic indicating heat detectors and System Sensor smoke detectors. The F4-3 accepts one or two optional internal 20 Watt evacuation amplifiers, and an optional transmitter for brigade connection. The panel complies with the requirements of NZS 4512:2010 and the New Zealand Building Code.

Features

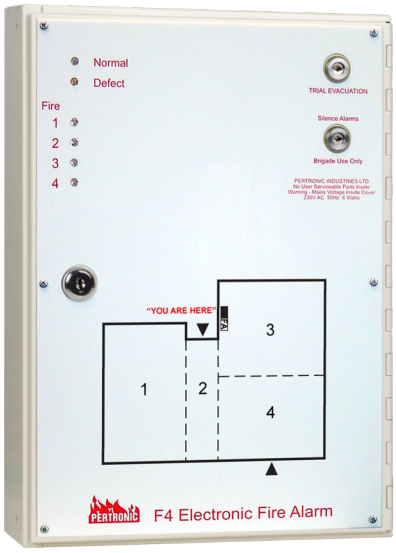
- Optional Front Service or Rear Service formats
- Front panel:
  - Indicators: Fire (per circuit); Normal; Defect
  - Key-switches: Trial Evacuation, Silence Alarms
- Supervised Bell circuit
- Alarm and Defect buzzer
- Up to two optional 20 Watt 100 Vrms line amplifiers with voice evacuation message
- Fire & Defect changeover relays
- Electrically-isolated alarm transmitter (SGD) interface
- Internal switches: Bell Cut-Off (BCO); Fire Relay Isolate; Brigade Isolate; Test; Reset
- On-board system defect LED indicates source of fault
- Optional DBA mode available on zone circuit 4: This provides non-latched bell circuit activation
- Optional F4-RMAX board provides
  - Connection for a remote LED mimic
  - Additional Fire and Defect relays
- Optional brigade connection using internally mounted Pertronic SGD7 or SGD8 transmitter
- Silence Alarms (BCO) key-switch provides reset and isolate functions (see Technical Manual for details)
- Automatic Alarm Verification Facility (AVF) protects against transient unwanted alarm activation
- Door Interlock
- Earth leakage supervision
- Automatic daily battery and detection circuit test
- Automatic Battery Absent detection

NZS 4512 Type 5

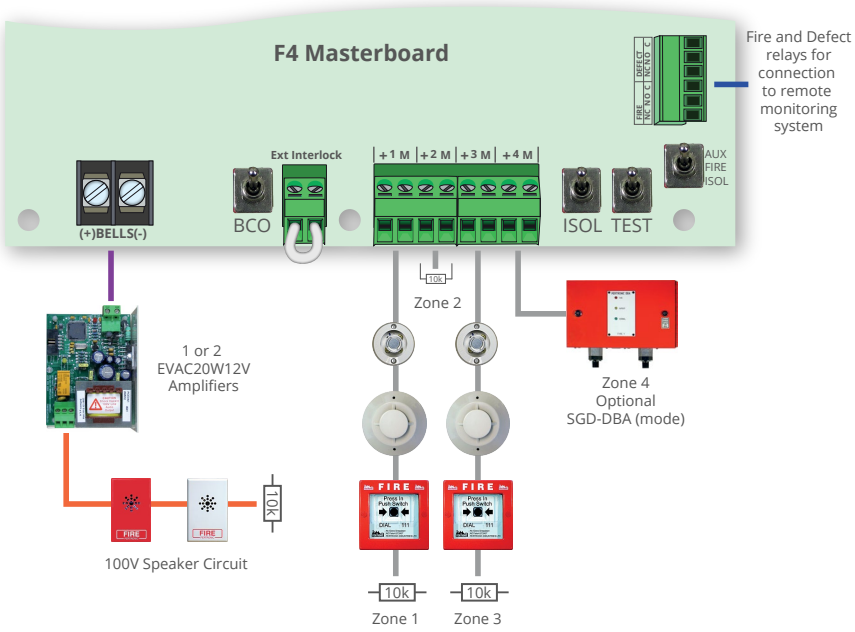
- A special version of the Pertronic F4 is available for use in NZS 4512 Type 5 systems. Please refer to the “F4 Type 5 Conventional Fire Alarm Control Panel” datasheet for details.

Specification

Electrical	
Power Supply	230 Vac 50 Hz, 5 W 13.7 Vdc 400 mA
Quiescent Current	28 mA @ 12 Vdc
Defect Current	30 mA @ 12 Vdc
Alarm Current	155 mA @ 12 Vdc plus sounder load
Bell Output	12 Vdc 5 A
Battery (internal)	
Capacity	12 Vdc 7 Ah
Type	Sealed lead acid (gel cell)
Integral Float Charger	13.7 V dc 372 mA
Environmental	
Operating Temperature	0 to +40° C
Humidity	10 to 95% RH (non-condensing)
Mechanical	
Overall Dimensions Front service Rear Service	 350 x 245 x 87 (H x W x D mm) 350 x 245 x 92 (H x W x D mm)
Weight	2.2 kg excluding battery
Cabinet Material	1.2 mm mild steel powder coated
Colour	Off White



The Pertronic F4-3



F4-3 System Diagram

Detection Zone Circuits

- Four circuits terminated with 10 kΩ EOL resistors
- Accept a mix of System Sensor detectors, Pertronic indicating heat detectors and indicating MCPs
- Each circuit may have:
  - Up to 40 System Sensor point smoke or heat detectors
  - A total of 50 Pertronic indicating heat detectors or indicating MCPs

Ordering Information

Product Code	Description	NZFPA Listing
F4FS-3	F4 Panel Front Service – 12 Volt	PI/121
F4FS-3EA	F4 Front Service Panel with 20W Evac – 12 Volt	PI/121
F4RS-3	F4 Panel Rear Service – 12 Volt	PI/121
F4RS-3EA	F4 Rear Service Panel with 20W Evac – 12 Volt	PI/121

Important Note:

- Non-indicating heat detectors and MCPs will NOT produce a Fire Alarm signal when triggered and MUST NOT be used with the NZS 4512:2010 standard F4-3 panel. A hard short-circuit or open-circuit on a Pertronic NZS 4512:2010 conventional detection circuit will produce a defect signal.