CSIRO Verification Services
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# Certificate of Conformity

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| **afp - 1292** | 22-Feb-2000 | 18 | 8-Apr-2024 | 30-Apr-2025 | |

## Product designation

**Pertronic, Model F100A, fire inidicator panel**

(Refer to the Schedule/enclosures for further specified details)

## Agent/distributor

Pertronic Industries Pty Limited
Unit B2, Hallmarc Business Park, 2A Westall Road, SPRINGVALE, VIC, AUSTRALIA, 3171

## Registrant

Pertronic Industries Pty Limited
Unit B2, Hallmarc Business Park, 2A Westall Road, SPRINGVALE, VIC, AUSTRALIA, 3171

**Producer**

Pertronic Industries Limited
17 Eastern Hutt Road, WINGATE, LOWER HUTT, NEW ZEALAND, 5019

## Conformance criteria and evaluation

The Pertronic, Model F100A, fire inidicator panel has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 4428.1-1998, 'Fire detection, warning, control and intercom systems - Control and indicating equipment - Fire'.

## Limitations/conditions of conformance

**Limitations/conditions of conformance, where identified on this certificate, are derived from qualifications from evaluation(s) for conformity and/or other related technical documentation. All details with respect to design, assembly and installation instructions and restrictions should be checked against the producer's current technical manual/data sheets and the requirements of the Authority having Jurisdiction.**

Specified limitations/conditions, determined from the evaluation for conformity, include the following.

i. Compatibility of this equipment with new or existing actuating devices should be verified prior to installation.

This certification is issued within the scope of CSIRO Verification Services – Rules governing ActivFire Scheme and is valid only for the product(s) as submitted for evaluation and verification of conformity, subject to the following conditions.

- Reference to details, limitations and requirements, where documented as a schedule/enclosure with this certificate.
- The Registrant is responsible for their attestation of conformity and ensuring that on-going production complies with the conformance criteria defined in this certificate.
- This certificate will not be valid if any changes or modifications are made to the product which have not been notified and validated by CSIRO Verification Services.
- This certificate is subject to periodical re-validation upon verification that all requirements, as determined by the conformity assessment body, continue to be satisfactorily met by the Registrant.
- This certificate may only be reproduced in its published form, without modification and inclusive of all schedules/enclosures.
- Any changes, errors or omissions, must be submitted in writing and if necessary or requested, substantiated with relevant evidence.
- Any representations, such as advertising or other marketing related activities or articles shall reflect the correct contents of this certificate and conform with all relevant trade practices .and consumer protection legislation and regulations.
- Any terms or conditions of use as applicable to content and documentation as published or accessed through web sites administered by the CSIRO Verification Services.

Issued by

Kai Loh
Executive Officer – ActivFire Scheme

# Schedule to
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## Producer's description

The Pertronic, Model F100A, fire inidicator panel is an analogue addressable automatic fire alarm system that communicates with detector zones and control modules via a 2-wire fault tolerant loop. Each loop is designed to accommodate up to 198 addressable devices, allowing a maximum of 99 sensors and 99 monitor/control modules.

The Firetronix, Model F100A Loop Responder and Relay Responder allow for conventional detector circuits and relay outputs to be used on the loop. The F100A Loop Responder provides for 8 conventional detector circuits and one relay output, with a maximum of 11 Loop Responders on each loop. The F100A Relay Responder provides 4 relay outputs that may be monitored with a maximum of 24 Loop Responders on each loop. The loop relays may be configured as warning system relays, ACF relays, or as door holder relays. The Pertronic, Model F100A, fire inidicator panel provides seven relay outputs; three monitored for warning system, four relays for Master Alarm, Fault, Battery Fail, and Door Holder.

The Pertronic, Model F100A, fire inidicator panel annunciates all point information on a back-lit, 2 line by 40 character liquid crystal display (LCD). The seven push buttons within the Fire Fighters Facility (FFC) are designated External Bells Isolate, Warning System Isolate, Acknowledge, Reset, Isolate, Previous, and Next. Three control buttons adjacent to the FFC are designated Bell On, ACF Isolate, and Door Handle Isolate. User access to the FIP is provided by six dynamic buttons below the LCD.

## Technical specification

**The following details are a representative extract of the technical specification for the Pertronic, Model F100A, fire inidicator panel and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.**

**Power Supply:**

| | |
|---|---|
| **Type:** | Switch Model 22864 |
| **Nominal output voltage:** | 27.4 V |
| **Maximum rated output current:** | 1.53 A |
| **Circuit current limit:** | 1.8 A |
| **Current limit rating:** | 1.8 A (electronic) |

**Battery charger:**

| | |
|---|---|
| **Voltage setting:** | 27.4 V |
| **Maximum rated output:** | 1.53 A |
| **Current limit device rating:** | 10 A (fuse) |

**Panel:**

| | |
|---|---|
| **Quiescent panel load:** | 0.31 A @ 27.3 V |
| **Minimum power supply load:** | 0.526 A |
| **Required battery capacity:** | 7.66 Ah |
| **Nominated battery capacity:** | 15 Ah |

## Supplementary information

Evaluated modules

| Module description | Assembly number | Rev | PCB number | Iss | Tech. drawing number | Iss |
|---|---|---|---|---|---|---|
| F100A main PCB | F100 A1-A1 | 1.1 | F100 A1-A1 | 1.3 | F100 A1-A1 | 1.3.6 |
| F100a 1.5a power supply | F100 A-A3 | | F100 A-A3 | 2.0 | F100 A-A3 | 2.3 |
| F100A keyboard display unit | F100 A-A2 | | F100 A-A2 | 1.5 | F100 A-A2 | 2.0 |
| F100A LCD remote mimic | F100 A-2 | | F100 A-2 | 1.5 | F100 A-2 | 2.0 |
| Firetronix 8 circuit, 1 relay loop responder | AA8LR | 1.0 | AA8LR | 2.11.a | AA8LR | 2.11.2 |
| Firetronix 4 way relay loop responder (monitored) | AA4MMR | 1.0 | AA4MMR | 2.11 | AA4MMR | 2.11.1 |
| Firetronix 4 way relay loop responder (not monitored) | AA4NRR | 1.0 | AA4NRR | 1.0 | AA4NRR | 1.1 |

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| EPROMS: | |
|---|---|
| Firmware F100A02 | Version 1.62.1 |
| Firmware LCD | Version 3.06 |

Addressable devices:

| Device type | Max addressable points on analogue loop | Max addressable points on analogue line | Reference |
|---|---|---|---|
| System Sensor, M500MB Monitor Module | 99 | 40* | XF1456/R2, Feb 2000, AS 4428.1- 1998 |
| System Sensor, M501MB Monitor Module (miniature) | 99 | 40* | " |
| System Sensor, M503ME Monitor Module (micro with LED) | 99 | 40* | " |
| System Sensor, M500CH Control Module | 99 | 40* | " |
| System Sensor, M500X Zone Isolator | 99 | 40* | " |
| Firetronix AA8LR S Circuit, 1 Relay Loop Responder | 11 | n/a | " |
| Firetronix, AA4MRR 4 Way Relay Responder | 24 | n/a | " |

Actuating devices
AZF module num.: Pertronic loop protocol
Nominal detector line voltage: 17 V

| Device type | Max addressable points on analogue loop | Maximum addressable points on analogue line | Reference |
|---|---|---|---|
| System Sensor, 1251AUS, Smoke Ionisation | 99 | 40* | XF1456/R2, Feb 2000, AS 4428.1- 1998 |
| System Sensor, 2251AUS, Smoke Photoelectric | 99 | 40* | " |
| System Sensor, 3251AUS, Sensor | 99 | 40* | " |
| The above detectors with the System Sensor B501 base. | | | |
| System Sensor, M500KAC, MCP | 99 | 40* | XF1456/R2, Feb 2000, AS 4428.1- 1998 |

AZF module num..: Responder Module Rev. 1:

| Device type | Maximum number of devices per AZF | Reference |
|---|---|---|
| System Sensor, 51A51, Heat Type A | 40* | XF1742/R1, Dec 2000, |
| System Sensor, 51C51, Heat Type C | 40* | Compatibility Assessment |
| The above detectors with the System Sensor B401 base. | | |

* Maximum number of detectors per AZF/AZC allowed by code.