

Australian Standard™

**Fire detection, warning, control and
intercom systems—Control and
indicating equipment**

Part 5: Power supply units

This Australian Standard was prepared by Committee FP-002, Fire Detection, Warning, Control and Intercom Systems. It was approved on behalf of the Council of Standards Australia on 30 January 1998 and published on 5 June 1998.

The following are represented on Committee FP-002:

Audio Engineering Society
Australasian Fire Authorities Council
Australian Building Codes Board
Australian Chamber of Commerce and Industry
Australian Chamber of Manufactures
Australian Electrical and Electronic Manufacturers Association
Commonwealth Fire Board
Deafness Forum of Australia
Department of Defence
Fire Protection Association of Australia
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intercom systems—Control and
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Part 5: Power supply units

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FP-002, Fire Detection, Warning, Control and Intercom Systems, to provide performance requirements for power supply units associated with control and indicating equipment, alarm signalling equipment, intercommunication and emergency warning systems.

This Standard incorporates Amendment No. 1 (October 2002). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure, or part thereof affected.

This committee has, during the development of this Standard, drawn on ISO/CD 7240-4, and the assistance from this source is hereby acknowledged.

This Standard is the result of a consensus among representatives on the joint committee to produce it as an Australian Standard.

This Standard is part of a suite of Standards for control and indicating equipment (CIE). This suite of Standards when complete will comprise—

- (a) general requirements and test methods;
- (b) fire;
- (c) emergency warning;
- (d) emergency intercom;
- (e) power supply units (this Standard);
- (f) alarm signalling equipment;
- (g) air handling fire mode control;
- (h) suppression; and
- (i) requirements for wire-free alarm zone circuits.

When reading AS 4428.0 in conjunction with this Standard, references to control and indicating equipment should be read as references to power supply units where appropriate.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

A1 | Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

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STANDARDS AUSTRALIA

Australian Standard

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Part 5: Power supply units

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies functional, safety and performance requirements for power supply units.

1.2 APPLICATION

The requirements of this Standard apply to power supply units (PSU) used to supply power to equipment such as—

- (a) control and indicating equipment;
- (b) actuating and output devices;
- (c) alarm signalling equipment; and
- (d) ancillary equipment.

NOTE: Where the ancillary equipment is not an essential part of the fire safety system and does not require a stand-by power source, but is electrically connected to CIE, the electrical safety requirements of this Standard apply.

^{A1} Where this Standard is subsidiary to another CIE Standard, the other Standard may add to, or remove, the requirements specified in this Standard.

The PSU shall have inputs and outputs necessary for interfacing to connected equipment and shall comply with all the relevant parts of the Standard appropriate for that equipment.

NOTES:

- 1 Where an installation is required to be connected to a monitoring service to satisfy the requirements of the Building Code of Australia (BCA), reference should be made to the BCA for guidance on that connection.
- 2 Typical PSU configurations are shown in Appendix A.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

2484	Fire—Glossary of terms
2484.2	Part 2: Fire protection and firefighting equipment
2706	Numerical values—Rounding and interpretation of limiting values
3000	Electrical installations—Building, structures and premises (known as the SAA Wiring Rules)
3100	Approval and test specification—General requirements for electrical equipment
4029	Stationary batteries—Lead-acid