AS 4625—2005

Australian Standard™

Electronic flame safeguards and flame detectors

STANDARDS AUSTRALIA

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Australian Standard™

Electronic flame safeguards and flame detectors

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PREFACE

This Standard was reviewed by the Standards Australia Committee, AG-011, Gas Components and Industrial Equipment, to supersede AG 210—1998, *Approval requirements for electronic flame safeguards and flame detectors*. The Standard is republished without technical alterations.

The objective of this Standard is to provide manufacturers, designers, regulatory authorities, testing laboratories and similar organizations with uniform minimum requirements for the safety, performance and use of combination controls for electronic flame safeguards and flame detectors.

This Standard should not be regarded as a design specification or as an instruction manual.

In its preparation, consideration has been given to—

(a) continuity of satisfactory operation;

(b) the prevention of fire hazards, and explosions;

(c) the prevention of injury to persons or property;

(d) gas rules and regulations now in force; and

(e) relevant International Standards.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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

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SECTION 1 SCOPE, CLASSIFICATION AND DEFINITIONS

1.1 SCOPE

These requirements apply to electronic flame safeguards and flame detectors for use on gas or multi-fuel burners.

They do not cover complete burner management systems except insofar as the flame safeguard has provision to be interlocked into the burner management system.

Compliance with these requirements does not imply acceptability for use without supplemental tests in an intended application.

A flame safeguard and flame detector shall comply with the requirements of the appropriate electrical authority.

Where a programmable electronic system (PES) is employed for safety related functions of burner management systems, the PES shall:

(a) be certified to the requirements of this Standard and conform to the relevant requirements of EN 298 (or equivalent); or

(b) be certified by a body recognized by the Certifying Body to the requirements of EN 298 (or equivalent).

Requirements for thermoelectric flame safeguards and electronic igniters are published in AS 4620 and AS 4622.

Flame safeguards incorporating electronic igniters shall meet the requirements of both this Standard and all the appropriate requirements of AS 4622.

European Standard, EN 298, has been identified as an appropriate Standard for the evaluation of electronic flame safeguards and flame detectors. Compliance with EN 298 will also be deemed to comply with the requirements of this Standard, however, specific local requirements as specified in this Standard shall take precedence.

NOTES:

(a) Compliance will be subject to the provision of relevant documentation submitted to the Certifying Body.

(b) Refer to Appendix C, which details equivalent European classification codes.

1.2 CLASSIFICATION

1.2.1 Class

The flame safeguard may be one of three classes:

(a) Class 1 Has a safe start check and a continual self-check of the flame safeguard and flame detector.

(b) Class 2 Has a safe start check of the flame safeguard and flame detector.