AS 4620—2004

Australian Standard™

Thermoelectric flame safeguards

STANDARDS AUSTRALIA

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PREFACE

This Standard was reviewed by the Standards Australia Committee, AG-011, Gas Components and Industrial Equipment, to supersede AG 204—1998, *Approval requirements for thermoelectric flame safeguards.* 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 thermoelectric flame safeguards.

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 flame safeguards operating on the thermoelectric principle.

Compliance with these requirements does not imply that a flame safeguard is acceptable for use without supplemental tests in its intended application.

Thermoelectric flame safeguards incorporating electrical components shall comply with the requirements of the appropriate electrical authority.

Requirements for combination controls are published in AG 209 (to be AS 4624) and for electronic flame safeguards are published in AG 210 (to be AS 4625).

1.2 CLASSIFICATION

Flame safeguards shall be classified according to type and class.

1.2.1 Type

The flame safeguards referred to herein may be one of two types:

(a) Valve type flame safeguards—These incorporate a valve or valves that upon flame failure cut off the gas supply directly.

(b) Switch type flame safeguards—These incorporate an electrical switch that upon flame failure breaks an electrical circuit. Switch type flame safeguards may include a pilot valve.

1.2.2 Class

The valve in the thermoelectric flame safeguard shall be classified as follows:

Class 1—A shut off valve having the tightest shut off requirements with respect to closure against reverse flow conditions.

Class 2—As Class 1 but with a lower shut off requirement with respect to closure against reverse flow conditions.

Class 3—As Class 1 but with no closure requirements against reverse flow conditions.

1.3 DEFINITIONS

For the purpose of this Standard, the following definitions apply:

1.3.1 Authority

Means the authority having jurisdiction or such authority as delegated. (Technical Regulator).