

Australian Standard™

Gas appliance thermostats

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AGA (Network Operators)
AGA Certification Services
Appliance and Component Testing
Australian Liquefied Petroleum Gas Association
Gas Appliance Manufacturers Association of Australia
Gas Appliances and Services Association
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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 4619—2004

Gas appliance thermostats

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NOTES

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PREFACE

This Standard was reviewed by the Standards Australia Committee, AG-011, Gas Components and Industrial Equipment, to supersede AG 203—1998, *Approval requirements for gas appliance thermostats*. 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 gas appliance thermostats.

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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STANDARDS AUSTRALIA

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SECTION 1 SCOPE, CLASSIFICATION AND DEFINITIONS

1.1 SCOPE

These requirements apply to gas appliance thermostats up to 50 mm size for use on natural gas (NG), simulated natural gas (SNG), town gas (TG), tempered liquefied petroleum gas (TLP) and liquefied petroleum gas (LPG), at pressures up to 1050 kPa.

Thermostats covered are those in which the temperature sensing element and the thermostat valve are an integral unit. Thermostats using electrical or other auxiliary power supplies are covered only in relation to their function on gas appliances.

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

A thermostat incorporating electrical components shall comply with the requirements of the appropriate electrical authority.

Requirements for thermostats incorporated in a combination control are published in AG 209 (to be AS 4624).

1.2 CLASSIFICATION

Thermostats shall be classified according to mode of operation and type of sensor.

1.2.1 Mode

Three modes of operation shall be:

- (a) Modulating—Where the flow rate of gas is continuously controlled between the fully open and bypass/shut off positions of the thermostatic valve.
- (b) Snap-acting—Where the flow rate of gas is incrementally controlled at the full-open, bypass and shut off positions of the thermostatic valve.
- (c) A combination of modulating and snap-acting modes.

1.2.2 Sensor

Two types of sensor shall be:

- (a) Immersion—Where the sensor is in direct contact with the liquid or gas being sensed.
- (b) Surface contact—Where the sensor contacts a surface that is in turn heated or cooled.

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).