



CSA/ANSI Z21.23:22 • CSA 6.6:22  
National Standard of Canada  
American National Standard



## Gas appliance thermostats



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# Preface

This is the first edition of CSA/ANSI Z21.23/CSA 6.6, *Gas appliance thermostats*. It supersedes both ANSI Z21.23-2010, *Gas appliance thermostats*, and CAN1-6.6-M78, *Gas appliance thermostats*.

This Standard was prepared by the ANSI/CSA Joint Subcommittee on Standards on Automatic Gas Controls, under the jurisdiction of the Z21/83 Technical Committee on Performance and Installation of Gas Burning Appliances and Related Accessories, the Technical Committee on Gas Appliances and Related Accessories, and the Strategic Steering Committee on Standards for Fuel Burning Equipment, and had been formally approved by the Technical Committees and the Interprovincial/Territorial Gas Advisory Council.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

This Standard has been approved by the American National Standards Institute (ANSI) as an American National Standard.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

**Interpretations:** The Strategic Steering Committee on Standards for Fuel Burning Equipment has provided the following direction for the interpretation of standards under its jurisdiction: “The literal text shall be used in judging compliance of products with the safety requirements of this Standard. When the literal text cannot be applied to the product, such as for new materials or construction, and when a relevant committee interpretation has not already been published, CSA’s procedures for interpretation shall be followed to determine the intended safety principle.”

**Notes:**

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- 3) *This Standard was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
- 4) *To submit a request for interpretation of this Standard, please send the following information to [inquiries@csagroup.org](mailto:inquiries@csagroup.org) and include “Request for interpretation” in the subject line:*
  - a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
  - b) *provide an explanation of circumstances surrounding the actual field condition; and*
  - c) *where possible, phrase the request in such a way that a specific “yes” or “no” answer will address the issue.*

*Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at [standardsactivities.csa.ca](http://standardsactivities.csa.ca).*

- 5) *This Standard is subject to review within five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to [inquiries@csagroup.org](mailto:inquiries@csagroup.org) and include “Proposal for change” in the subject line:*
  - a) *Standard designation (number);*
  - b) *relevant clause, table, and/or figure number;*
  - c) *wording of the proposed change; and*
  - d) *rationale for the change.*

# CSA/ANSI Z21.23:22 • CSA 6.6:22

## Gas appliance thermostats

### 1 Scope

#### 1.1

This Standard applies to newly produced gas appliance thermostats of the integral gas valve type having a maximum operating gas pressure of 1/2 psi (3.5 kPa) or electric type (see Clause 3), constructed entirely of new, unused parts and materials.

This Standard does not apply to an electric type comfort heating thermostat (wallmounted) for installation remote from an appliance.

When the operating performance characteristics of the thermostat can be affected by the separate components, such as power supply, transformer, and valve(s), the thermostat is to be tested as part of a complete system.

Compliance of a device with this Standard does not imply that such device is acceptable for use on gas appliances without supplemental tests with the device applied to the particular appliance design.

#### 1.2

An accessory incorporated as an integral part of a thermostat is to comply with all provisions of the applicable standard for such a device.

#### 1.3

All references to psi throughout this Standard are considered gauge pressures, unless otherwise specified.

#### 1.4

In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the Standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

#### 1.5

The values given in imperial units are the units of record for the purposes of this Standard. The values given in parentheses are for information and comparison only.

**Note:** See Annex B.