

## Fans and ventilators



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# Preface

This is the eighth edition of CSA C22.2 No. 113, *Fans and ventilators*, one of a series of Standards issued under Part II of the *Canadian Electrical Code*. It supersedes the previous editions, published in 2008, 1984, 1982, 1981, 1976, 1974, and 1959.

For general information on the Standards of the *Canadian Electrical Code, Part II*, see the preface of CAN/CSA-C22.2 No. 0.

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

This Standard was prepared by the Subcommittee on Fans and Ventilators, under the jurisdiction of the Technical Committee on Consumer and Commercial Products and the Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the Technical Committee.

**Interpretations:** The Strategic Steering Committee on Requirements for Electrical Safety 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".

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March 2010

## 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 publication 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 publication.
- (4) CSA Standards are subject to periodic review, and suggestions for their improvement will be referred to the appropriate committee.

- (5)** *All enquiries regarding this Standard, including requests for interpretation, should be addressed to Canadian Standards Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6.*

*Requests for interpretation should*

- (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) be phrased where possible to permit a specific “yes” or “no” answer.*

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# C22.2 No. 113-10

## ***Fans and ventilators***

### **1 Scope**

#### **1.1**

This Standard applies to cord-connected and permanently connected fans and ventilators intended to be

- (a) connected to supply circuits of 600 V and less;
- (b) used in non-hazardous locations;
- (c) used indoors or outdoors; and
- (d) used in accordance with the Rules of the *Canadian Electrical Code, Part I*.

#### **1.2**

This Standard applies to fans and ventilators used for ventilating or exhaust and filter units consisting of an air-circulating fan and a mechanical filter.

#### **1.3**

This Standard applies to air-circulating-type fans and ventilators, such as desk, pedestal, hassock, utility, suitcase, and pendant ceiling fans.

#### **1.4**

This Standard applies to ventilating-type fans and ventilators, such as wall insert, ceiling insert, attic, household hood or canopy, and window fans. It also applies to fan-type air-to-air heat exchangers and to electronically commutated (brushless) dc component fans.

#### **1.5**

This Standard does not apply to the following:

- (a) air conditioning equipment;
- (b) electric air heaters;
- (c) fan coil units;
- (d) humidifiers;
- (e) evaporative coolers; and
- (f) electrostatic air cleaners.

#### **1.6**

Throughout this Standard, the term “fan” also includes ventilators.

#### **1.7**

In CSA Standards, “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 (nonmandatory) to define their application.