CSA Group

C22.2 No. 8-13
(reaffirmed 2018)

Electromagnetic interference (EMI) filters

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Preface

This is the fifth edition of CSA C22.2 No. 8, one of a series of Standards issued by CSA Group under Part II of the *Canadian Electrical Code*. It supersedes previous editions published in 1934, 1945, 1982, and 1986.

The major changes incorporated in this new edition include

a) modification of the scope to include dc filters and extend the filters up to 750 v;
b) exemption of the flame test in Clause 6.13 for enclosures having a flammability rating of 5 VA;
c) deletion of the 15 cm lead length limit in Clause 6.6.2 and replacing it with a reference to Table 1 of the *Canadian Electrical Code Part I*; and
d) updating of the reference standards to latest editions.

For general information on the Standards of the *Canadian Electrical Code, Part II*, see the preface of CSA C22.2 No. 0, *General Requirements–Canadian Electrical Code, Part II*.

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

This Standard was prepared by a Subcommittee of the Technical Committee on Consumer and Commercial Products under the jurisdiction of the Standards Steering Committee on *CE Code, Part II*, and was formally approved by the Technical Committee.

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 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.

5) *This Standard is subject to review five years from the date of publication, and 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 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.*

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are published in CSA's periodical Info Update, which is available on the CSA Web site at www.csa.ca.

C22.2 No. 8-13
Electromagnetic interference (EMI) filters

1 Scope

1.1
This Standard applies to filters intended for suppressing electromagnetic interference in, or with, apparatus and machines that are to be connected to an ac supply with nominal system voltages of up to 750V and a nominal frequency of up to 60 Hz or connected to a dc supply up to 1060 V dc, intended to be used in nonhazardous locations in accordance with the *Canadian Electrical Code, (CEC) Part I*.

1.2
General requirements applicable to this Standard are given in CSA C22.2 No. 0, *General Requirements–Canadian Electrical Code, Part II*.

1.3
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.

2 Reference publications
This Standard refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto.

CSA Group

B140.0-03 (R2008)
Oil-burning equipment: General requirements

C22.1-12
Canadian Electrical Code, Part I

C22.2 No. 0-10
General Requirements—Canadian Electrical Code, Part II