



**CSA
Group**

C22.2 No. 269.4-17

Surge protective devices — Type 4 — Component assemblies



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M. Humphries	CSA Group, Toronto, Ontario	<i>Project Manager</i>

Subcommittee on Surge Protective Devices

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C. Thwaites	Mersen Canada Inc, Mississauga, Ontario	
D. Stefancic	CSA Group, Toronto, Ontario	<i>Project Manager</i>

Preface

This is the second edition of CSA C22.2 No. 269.4, *Surge protective devices — Type 4 — Component assemblies*. It supersedes the previous edition published in 2014. This Standard is one in a series of standards dealing with surge protective devices. This Standard is issued by CSA Group under Part II of the *Canadian Electrical Code*.

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

This edition incorporates numerous changes throughout to align the requirements with the revisions and updates made to other standards in this series.

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 Surge Protective Devices, under the jurisdiction of the Technical Committee on Industrial 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.”

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. 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.*

C22.2 No. 269.4-17

Surge protective devices — Type 4 — Component assemblies

1 Scope

1.1

This Standard covers component assembly surge protective devices (SPDs) consisting of two or more Type 5 components, intended for use in Type 1, 2, or 3 SPD applications or installation in other electrical equipment.

Note: *SPD components containing integral thermal devices are within the scope of CSA C22.2 No. 269.5.*

1.2

Type 4 component assemblies are designed for repeated limiting of transient voltage surges as specified in this Standard on 50 or 60 Hz power circuits over 42 V and not exceeding 750 V.

1.3

The surge protective component used in a Type 4 component assembly may include but not be limited to metal oxide varistors (MOVs), silicon avalanche diodes (SADs), spark gaps, and gas discharge tubes (GDT).

1.4

This Standard does not apply to EMI filters which may have surge suppression characteristics as covered in CSA C22.2 No. 8.

1.5

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

1.6

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 (nonmandatory) to define their application.