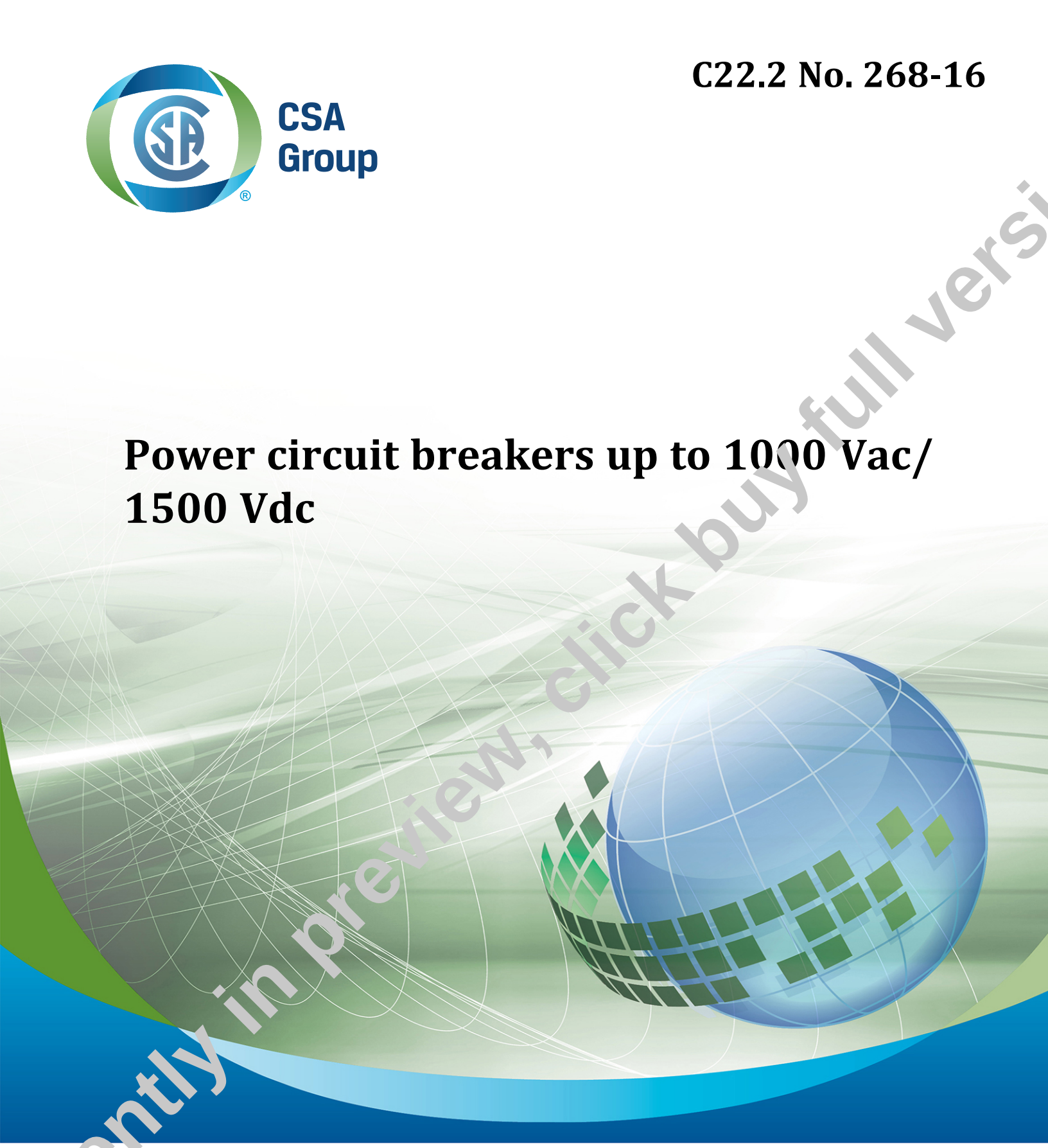
C22.2 No. 268-16

CSA Group

Power circuit breakers up to 1000 Vac/ 1500 Vdc



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Preface

This is the first edition of CSA C22.2 No. 268, *Power circuit breakers up to 1000 Vac/1500 Vd*, one of a series of Standards issued by CSA Group under Part II of the *Canadian Electrical Code*.

When published, this Standard will replace CSA TIL D-34.

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

Certain material in this Standard has been taken from IEEE C37.20.1-2002, *Metal Enclosed Low-Voltage Power Circuit Breaker Switchgear.* Reprinted with permission from IEEE, 3 Park Avenue, New York, New York, 10016-5997 USA, Copyright 2002, by IEEE.

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 Low Voltage Power Circuit Breakers 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 CSA committee interpretation has not already been published, CSA Group'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;*
- d) *rationale for the change.*

C22.2 No. 268-16
Power circuit breakers up to 1000 Vac/ 1500 Vdc

1 Scope

1.1
This Standard applies to power circuit breakers rated 1000 Vac or less nominal, 1058 Vac (RMS) maximum, and 1500 V dc maximum for use in nonhazardous locations in accordance with the *Canadian Electrical Code, Part I*.

1.2
This Standard applies to power circuit breakers of the following types:
a) stationary (fixed) mounted or drawout mounted types;
b) manually operated or power operated;
c) with or without electromechanical or solid-state type trip devices;
d) unfused power circuit breakers;
e) power circuit breakers with integrally mounted current limiting fuses;
f) power circuit breakers intended to be connected in series with current limiting fuses in a drawout assembly to form a non integrally fused circuit breaker; and
g) of two-, three-, or four-pole construction.

1.3
The circuit breakers covered by this Standard are intended for installation in circuit breaker enclosures, switchboards, switchgear, motor control centres, and similar equipment. The acceptability of the combination of a circuit breaker with respect to any overall enclosure will be determined by evaluation of the complete product assembly.

1.4
This Standard covers the requirements for direct acting current and voltage protective functions of
a) direct-acting overcurrent electromechanical trip devices;
b) direct-acting overcurrent electronic trip systems; and
c) undervoltage trip devices

1.5
This Standard does not apply to moulded case and insulated case circuit breakers covered by CSA C22.2 No. 5.

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 (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 editions listed below, including all amendments published thereto.

CSA Group

C22.1-15
Canadian Electrical Code, Part I

CAN/CSA-C22.2 No. 0-10
General requirements—Canadian Electrical Code, Part II

C22.2 No. 0.2-93 (R2013)
Requirements for insulation coordination

CAN/CSA-C22.2 No. 0.4-04 (R2013)
Bonding of electrical equipment

CAN/CSA-C22.2 No. 0.17-00 (R2013)
Evaluation of properties of polymeric materials

C22.2 No. 5-13
Molded-case circuit breakers, molded-case switches and circuit-breaker enclosures

IEC (International Electrotechnical Commission)

60947-2:2006
Low-Voltage Switchgear and Controlgear — Part 1: General Rules

IEEE (Institute of Electrical and Electronics Engineers)

C37.13-2015
IEEE Standard for Low-Voltage AC Power Circuit Breakers Used in Enclosures

C37.14-2015
IEEE Standard for Low-Voltage DC Power Circuit Breakers Used in Enclosures

C37.17-2012
IEEE Standard for Trip Systems for Low-Voltage (1000 V and below) AC and General Purpose (1500 V and below) DC Power Circuit Breakers

C37.20.1-2002
IEEE Standard for Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear

