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Fuseholders – Part 5: Class G

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ANSI/UL 4248-5-2022



Standard for Safety for Fuseholders – Part 5: Class G

Second Edition, Dated March 31, 2022

Summary of Topics

This Second Edition of Standard for Fuseholders – Part 5: Class G, dated March 31, 2022 incorporates editorial updates including renumbering and reformatting to align with current style.

As noted in the Commitment for Amendments statement located on the back side of the title page, UL, CSA, and ANCE are committed to updating this harmonized standard jointly.

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Commitment for Amendments

This standard is issued jointly by the Association of Standardization and Certification (ANCE), the Canadian Standards Association (operating as "CSA Group"), and Underwriters Laboratories Inc. (UL). Comments or proposals for revisions on any part of the standard may be submitted to ANCE, CSA Group, or UL at anytime. Revisions to this standard will be made only after processing according to the standards development procedures of ANCE, CSA Group, and UL. CSA Group and UL will issue revisions to this standard by means of a new edition or revised or additional pages bearing their date of issue. ANCE will incorporate the same revisions into a new edition of the standard bearing the same date of issue as the CSA Group and UL pages.

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This Standard is subject to review within 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: Standard designation (number); relevant clause, table, and/or figure number; wording of the proposed change; and rationale for the change.

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This ANSI/UL Standard for Safety consists of the Second Edition.

The most recent designation of ANSI/UL 4248-5 as an American National Standard (ANSI) occurred on March 31, 2022. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

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CONTENTS

PREFACE	5
1 Scope	7
2 Referenced Publications	7
3 Units of Measurement	7
4 General	8
5 Classification	8
6 Ratings	8
7 Markings	8
8 Construction – Contacts of a Cartridge Fuseholder	8
9 Tests	10
9.1 General	10
9.2 Verification of temperature rise	10

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No Text on This Page

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PREFACE

This is the harmonized ANCE, CSA Group, and UL Standard for Fuseholders – Part 5: Class G. It is the second edition of NMX-J-009/4248/5-ANCE, second edition of CSA C22.2 No. 4248.5, and the second edition of UL 4248-5. This edition of NMX-J-009/4248/5-ANCE supersedes the first edition published in 2007. This edition of CSA C22.2 No. 4248.5 supersedes the first edition published in 2007. This edition of UL 4248-5 supersedes the first edition published in 2007.

This harmonized standard was prepared by the Association of Standardization and Certification, (ANCE), CSA Group, and Underwriters Laboratories Inc. (UL). The efforts and support of the Technical Harmonization Subcommittee, 32B, Fuses, Fuseholders, on the Harmonization of Electrotechnical Standards of the Nations of the Americas (CANENA), are gratefully acknowledged.

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

The present Mexican Standard was developed by the TC 32 Fuses from the Comité de Normalización de la Asociación de Normalización y Certificación, A.C., CONANCE, with the collaboration of the fuse manufacturers and users.

This Standard was reviewed by the CSA Subcommittee on Fuses and Fuseholders, under the jurisdiction of the CSA Technical Committee on Industrial Products and the CSA Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the CSA Technical Committee. 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.

Application of Standard

Where reference is made to a specific number of samples to be tested, the specified number is to be considered a minimum quantity.

NOTE: 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.

Level of harmonization

This standard is published as an identical standard for ANCE, CSA Group, and UL.

An identical standard is a standard that is exactly the same in technical content except for national differences resulting from conflicts in codes and governmental regulations and basic safety principles and requirements. Presentation is word for word except for editorial changes.

Interpretations

The interpretation by the standards development organization of an identical or equivalent standard is based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one interpretation of the literal text has been identified, a revision is to be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

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Fuseholders – Part 5: Class G

1 Scope

1.1 This Part is intended to be read together with the Standard for Fuseholders – Part 1: General Requirements, hereafter referred to as Part 1. The titles of the Clauses in this Part correspond to the similarly titled Clauses in Part 1. The requirements of Part 1 apply unless modified by this Part. For the Part 1 requirements, refer to the Standard for Fuseholders – Part 1: General Requirements, NMX-J-009-4248-ANCE / CSA C22.2 No. 4248.1 / UL 4248-1.

1.2 These requirements cover fuseholders intended for use with Class G Fuses as described in the Standard for Low-Voltage Fuses – Part 5: Class G Fuses, NMX-J-009/248/5-ANCE / CSA C22.2 No. 248.5 / UL 248-5.

2 Referenced Publications

2.1 Any undated reference to a code or standard appearing in the requirements of this Standard shall be interpreted as referring to the latest edition of that code or standard.

2.2 When a reference is made to a code or standard, the product shall comply with the code or standard of the country in which the product is intended to be used.

2.3 Throughout this Standard, the CSA standard references apply to products intended for use in Canada, the ANCE NMX standard references apply to products intended for use in Mexico, and the UL standard references apply to products intended for use in the United States. Combined references are separated by a slash (“ / ”) to denote the difference between the applicable requirements specified for use in Canada, Mexico, and the United States.

2.4 The following publications are referenced in this Standard:

United States	Canada	Mexico
NFPA 70, National Electrical Code	CSA C22.1, Canadian Electrical Code, Part I	NOM-001, Mexican Electrical Code
	CSA C22.2 No. 0, General Requirements – Canadian Electrical Code, Part II	
UL 248-5, Low-Voltage Fuses – Part 5: Class G Fuses (<i>Trinational Standard</i>)	CSA C22.2 No. 248.5, Low-Voltage Fuses – Part 5: Class G Fuses (<i>Trinational Standard</i>)	NMX-J-009/248/5-ANCE, Low-Voltage Fuses – Part 5: Class G Fuses (<i>Trinational Standard</i>)
UL 4248-1, Fuseholders – Part 1: General Requirements (<i>Trinational Standard</i>)	CSA C22.2 No. 0.17, Evaluation of Properties of Polymeric Materials	
	CSA C22.2 No. 4248.1, Fuseholders – Part 1: General Requirements (<i>Trinational Standard</i>)	NMX-J-009-4248-ANCE, Fuseholders – Part 1: General Requirements (<i>Trinational Standard</i>)

3 Units of Measurement

3.1 The values given in SI (metric) shall be normative. Any other values given shall be for information purposes only.

4 General

4.1 In Canada, general requirements applicable to this Standard are given in CSA C22.2 No. 0, General Requirements – Canadian Electrical Code, Part II.

5 Classification

5.1 Class G fuseholders have a short-circuit withstand rating of 100,000 A. Class G fuseholders are rated 480 V or 600 V, and have four body sizes corresponding to the Class G fuse body size.

6 Ratings

6.1 Class G fuseholders shall be rated 480 or 600 V.

6.2 Class G fuseholders shall be rated 15, 20 A (600 V); 30, 60 A (480 V).

6.3 Class G fuseholders shall have a short-circuit withstand rating of a 100,000 A.

7 Markings

7.1 In addition to the requirements of Part 1, the fuseholder shall be marked with the following:

- a) "Use Class G Fuses";
- b) For panel mount and in-line fuseholders, "line" and "load" shall be marked, with the terminal recessed furthest in the device designated as the line terminal; and
- c) "DO NOT OPERATE UNDER LOAD" or equivalent for fuseholders of the modular design where the fuse is inserted or removed by use of a carrier.

8 Construction – Contacts of a Cartridge Fuseholder

8.1 The dimensions of a Class G fuseholder shall be as specified in [Figure 8.1](#).