UL 4248-9

STANDARD FOR SAFETY

Fuseholders – Part 9: Class K

UL Standard for Safety for Fuseholders – Part 9: Class K, UL 4248-9

First Edition, Dated February 28, 2007

Summary of Topics

This revision to ANSI/UL 4248-9, Standard for Safety for Fuseholders – Part 9: Class K, is being issued to reaffirm approval as an American National Standard. No changes in requirements are involved.

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

The editorial reaffirmation updates are substantially in accordance with Proposal(s) on this subject dated February 16, 2018.

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Fuseholders – Part 9: Class K

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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 any time. 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 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 inquires@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 First Edition including revisions through April 4, 2018.

The most recent designation of ANSI/UL 4248-9 as a Reaffirmed American National Standard (ANS) occurred on April 4, 2018. 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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PREFACE

This is the common ANCE, CSA Group, and UL standard for Fuseholders – Part 9: Class K. It is the first edition of NMX-J-009/4248/9-ANCE, the first edition of CSA C22.2 No. 4248-9, and the first edition of UL 4248-9.

This common standard was prepared by the Association of Standardization and Certification (ANCE), CSA Group, and Underwriters Laboratories Inc. (UL). The efforts and support of the CANENA Technical Harmonization Subcommittee 32B – Fuseholders are gratefully appreciated.

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

This standard was reviewed by the CSA Subcommittee on Low voltage fuses, 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 will be submitted to the Standards Council of Canada for approval as a National Standard of Canada.

This standard has been approved by the American National Standards Institute (ANSI) as an American National Standard.

A UL standard is current only if it incorporates the most recently adopted revisions, all of which are itemized on the transmittal notice that accompanies the latest set of revised requirements.

Where reference is made to a specific number of samples to be tested, the specified number shall 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. 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 9: Class K

1 General

This Part is intended to be read together with the Standard for Fuseholders – Part 1: General Requirements, hereafter referred to as Part 1. The numbering of the Clauses in this Part correspond to like numbered Clauses in Part 1. The requirements of Part 1 apply unless modified by this Part. For Clauses not shown below, refer to the Standard for Fuseholders – Part 1: General Requirements, NMX-J-009-4248-ANCE ♦ CSA C22.2 No. 4248.1 ♦ UL 4248-1.

1.1 Scope

1.1.2 These requirements cover fuseholders intended for use with Class K Fuses as described in NMX-J-009/248/9-2000-ANCE, CSA C22.2 No. 248.9, UL 248-9, Low-Voltage Fuses – Part 9: Class K Fuses.

4 Classification

4.1 Class K fuseholders have a minimum short-circuit withstand rating of 50,000 A. Class K fuseholders are rated 250 V or 600 V, and are divided into six body sizes in each voltage rating corresponding to the Class K fuse body sizes.

5 Characteristics

5.1 Summary of characteristics

5.1.3 Voltage and current rating

5.1.3.1 Class K fuseholders shall be rated 250 V or 600 V.

5.1.3.2 Class K fuseholders shall be rated 30, 60, 100, 200, 400, or 600 A.

5.1.4 Withstand rating

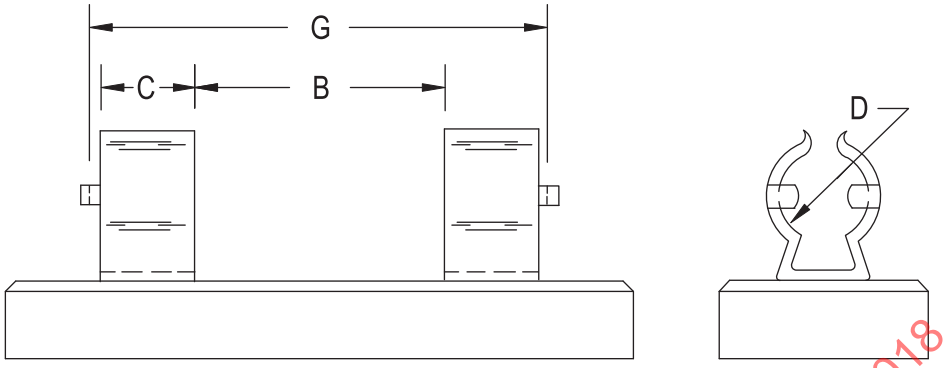
5.1.4.1 Class K fuseholders shall have a minimum short-circuit withstand rating of a 10,000 A.

7 Construction

7.6 Contacts of a cartridge fuseholder

7.6.1 The dimensions of a Class K fuseholder, shall be as specified in Figure 7.6A or 7.6B, whichever is applicable.

Figure 7.6A
Class K fuseholder – Ferrule-contact type



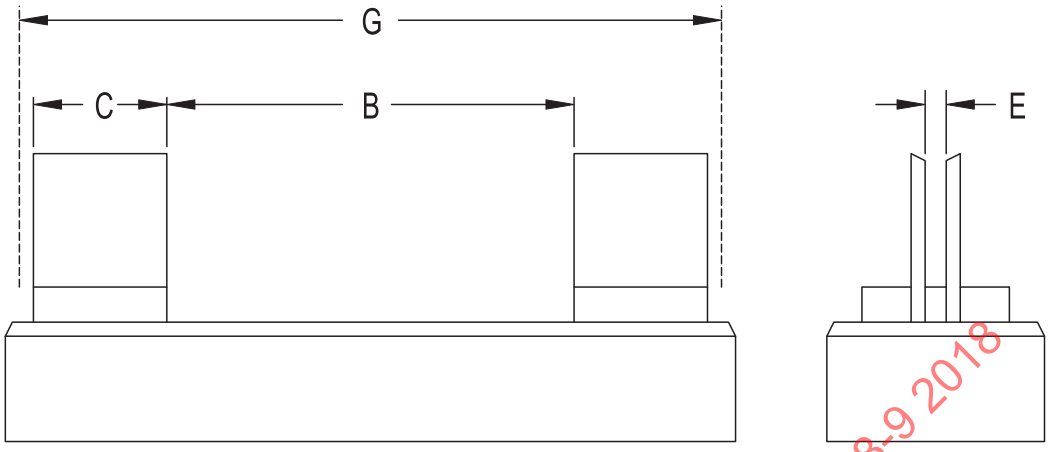
Tabs shown are a typical end-stop configuration.

Class of fuse	Potential rating of fuse, volts	Current rating of fuse, amperes	Dimensions, mm (in)					
			B	C	D	E	G	
			Distance [a] between contact clips	Minimum width of contact clip	Diameter of ferrule	Thickness of blade	Distance between end stops	
							Minimum	Maximum
K	250	30	25.4 (1.0)	12.7 (0.5)	14.27 (0.562)	–	51.59 (2.031)	53.97 (2.125)
		60	44.45 (0.750)	15.88 (0.625)	20.62 (0.812)	–	76.99 (3.031)	79.38 (3.125)
		100	101.6 (4.0)	22.22 (0.875)	–	3.18 (0.125)		–
		200	114.3 (4.5)	31.75 (1.250)	–	4.75 (0.187)		–
		400	127.0 (5.0)	44.45 (1.750)	–	6.35 (0.250)		–
		600	152.4 (6.0)	53.97 (2.125)	–	6.35 (0.250)		–
	600	30	101.6 (4.0)	12.7 (0.5)	20.62 (0.812)	–	127.79 (5.031)	130.17 (5.125)
		60	107.95 (4.250)	15.88 (0.625)	26.97 (1.062)	–	140.49 (5.031)	142.88 (5.625)
		100	152.4 (6.0)	22.23 (0.785)	–	3.18 (0.125)		–
		200	177.8 (7.0)	31.75 (1.250)	–	4.75 (0.187)		–
		400	203.2 (8.0)	44.45 (1.750)	–	6.35 (0.250)		–
		600	228.6 (9.0)	53.97 (2.125)	–	6.35 (0.250)		–

[a] Tolerances for the B dimensions are:

60 A or less:	plus 0.79 mm (0.031 in) and minus 1.57 mm (0.062 in);
100 and 200 amperes:	plus 1.57 mm (0.062 in) and minus 0.79 mm (0.031 in);
400 and 600 amperes:	plus 2.36 mm (0.093 in).

Figure 7.6B
Class K fuseholder – Knife-blade type



Class of fuse	Potential rating of fuse, volts	Current rating of fuse, amperes	Dimensions, mm (in)					
			B	C	D	E	G	
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		100	101.6 (4.0)	22.22 (0.875)	–	3.18 (0.125)		–
		200	114.3 (4.5)	31.75 (1.250)	–	4.75 (0.187)		–
		400	127.0 (5.0)	44.45 (1.750)	–	6.35 (0.250)		–
		600	152.4 (6.0)	53.97 (2.125)	–	6.35 (0.250)		–
	600	30	101.6 (4.0)	12.7 (0.5)	20.62 (0.812)	–	127.79 (5.031)	130.17 (5.125)
		60	107.95 (4.250)	15.88 (0.625)	26.97 (1.062)	–	140.49 (5.031)	142.88 (5.625)
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