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Third Edition



CSA Group  
CSA-C22.2 No. 4248.8:24  
Third Edition



ULSE Inc  
UL 4248-8  
Third Edition

## Fuseholders – Part 8: Class J

January 10, 2024

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ANSI/UL 4248-8-2024



Standard for Safety for Fuseholders – Part 8: Class J

Third Edition, Dated January 10, 2024

**Summary of Topics**

***This is the Third Edition of the Standard for Safety for Fuseholders – Part 8: Class J dated January 10, 2024.***

***As noted in the Commitment for Amendments statement located on the back side of the title page, ULSE, CSA Group, 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 ULSE Inc. (ULSE). Comments or proposals for revisions on any part of the standard may be submitted to ANCE, CSA Group, or ULSE at any time. Revisions to this standard will be made only after processing according to the standards development procedures of ANCE, CSA Group, and ULSE. CSA Group and ULSE 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 ULSE pages.

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

The most recent designation of ANSI/UL 4248-8 as an American National Standard (ANSI) occurred on January 10, 2024. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

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## PREFACE

This is the harmonized ANCE, CSA Group, and UL standard for Fuseholders – Part 8: Class J. It is the third edition of NMX-J-009/4248/8-ANCE, the third edition of CSA C22.2 No. 4248-8, and the third edition of UL 4248-8. This edition of NMX-J-009/4248/8-ANCE supersedes the previous edition published on February 28, 2007. This edition of CSA C22.2 No. 4248-8 supersedes the previous edition published on February 28, 2007. This edition of UL 4248-8 supersedes the previous edition published on April 30, 2018.

This harmonized standard was prepared by the Association of Standardization and Certification (ANCE), CSA Group, and ULSE. 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.

The present Mexican standard was developed by the CT 32, Fusibles from the Comité de Normalización de la Asociación de Normalización y Certificación, A.C., CONANCE, with the collaboration of the fuses 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.

NMX-J-009/4248/8-ANCE is to be used in conjunction with the third edition of NMX-J-009/4248/1-ANCE. The requirements for Fuseholders – Class J are contained in this Part 8 Standard and NMX-J-009/4248/1-ANCE. Requirements of this Part 8 Standard, where stated, amend the requirements of NMX-J-009/4248/1-ANCE. Where a particular subclause of NMX-J-009/4248/1-ANCE is not mentioned in NMX-J-009/4248/8-ANCE, the NMX-J-009/4248/1-ANCE subclause applies.

CSA C22.2 No. 4248-8 is to be used in conjunction with the third edition of CSA C22.2 No. 4248-1. The requirements for Fuseholders – Class J are contained in this Part 8 Standard and CSA C22.2 No. 4248-1. Requirements of this Part 8 Standard, where stated, amend the requirements of CSA C22.2 No. 4248-1. Where a particular subclause of CSA C22.2 No. 4248-1 is not mentioned in CSA C22.2 No. 4248-8, the CSA C22.2 No. 4248-1 subclause applies.

UL Standard 4248-8 is to be used in conjunction with the third edition of UL 4248-1. The requirements for Fuseholders – Class J are contained in this Part 8 Standard and UL 4248-1. Requirements of this Part 8 Standard, where stated, amend the requirements of UL 4248-1. Where a particular subclause of UL 4248-1 is not mentioned in 4248-8, the UL 4248-1 subclause applies.

### Level of harmonization

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

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 8: Class J

## 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-009-4248/1-ANCE / CSA C22.2 No. 4248.1 / UL 4248-1

1.2 These requirements apply to fuseholders intended for use with Class J Fuses as described in NMX-J-009/248/8-ANCE, CSA C22.2 No. 248.8, UL 248-8, Low-Voltage Fuses – Part 8: Class J Fuses.

1.3 Fuseholders also intended for fuses covered by other Parts shall also comply with the applicable fuseholder requirements for that Part.

## 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
UL 248-8, Low-Voltage Fuses – Part 8: Class J Fuses (Trinational)	CSA C22.2 No. 0, General Requirements – Canadian Electrical Code, Part II	
UL 746C, Standard for Polymeric Materials – Used in Electrical Equipment Evaluations	CSA C22.2 No. 248.8, Low-Voltage Fuses – Part 8: Class J Fuses (Trinational)	NMX-J-009/248/8-ANCE, Low-Voltage Fuses – Part 8: Class J Fuses (Trinational)
UL 4248-1, Fuseholders – Part 1: General Requirements (Trinational)	CSA 22.2 No. 0.17, Evaluation of Properties of Polymeric Materials	
	CSA C22.2 No. 4248.1, Fuseholders – Part 1: General Requirements (Trinational)	NMX-J-009-4248/1-ANCE, Fuseholders – Part 1: General Requirements (Trinational)

### 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 J fuseholders have a short-circuit withstand rating of 200,000 A. Class J fuseholders are rated 600 V and are divided into six body sizes corresponding to the Class J fuse body sizes.

### 6 Characteristics

6.1 Class J fuseholders shall be rated 600 V.

6.2 Class J fuseholders shall be rated 30, 60, 100, 200, 400, or 600 A.

6.3 Class J fuseholders shall have a short-circuit withstand rating of a 200,000 A.

### 7 Markings

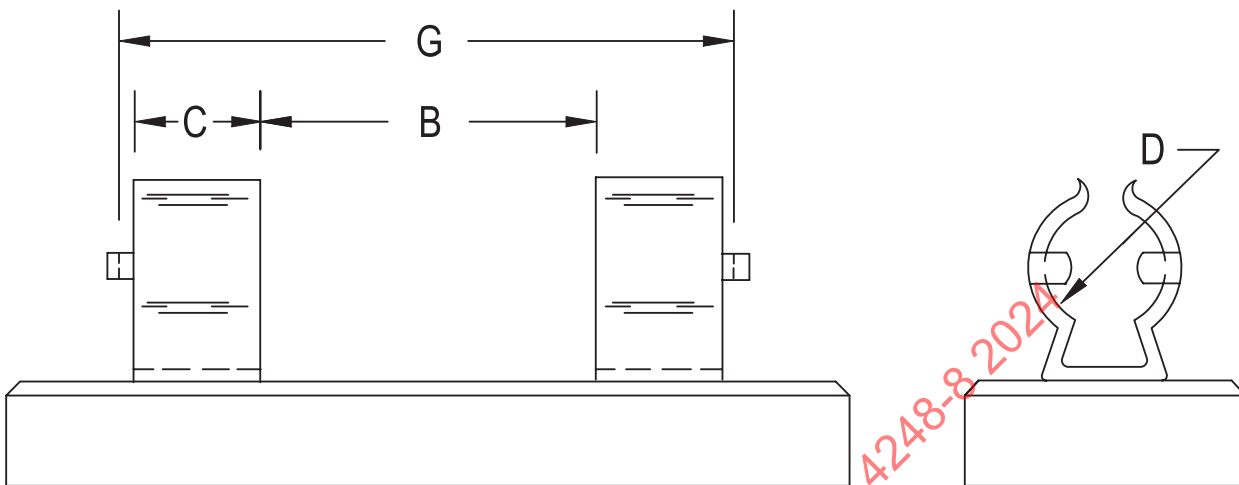
7.1 In addition to the requirements of Part 1: the fuseholder shall be marked "Use Class J Fuses".

### 8 Construction – Contacts of a cartridge fuseholder

8.1 The dimensions of a Class J fuseholder shall be as specified in [Figure 8.1](#), [Figure 8.2](#), or [Figure 8.3](#), whichever is applicable.



**Figure 8.1**  
**Class J 30 and 60 A Fuseholders**



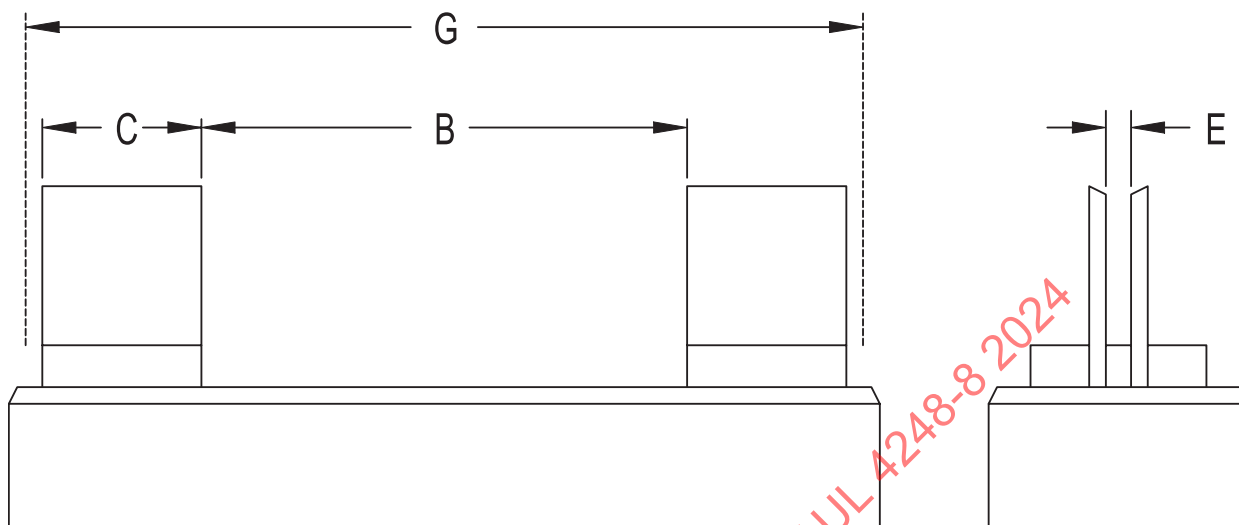
SB0574B

Tabs shown are a typical end-stop configuration.

Class of fuse	Potential rating of fuse, volts	Current rating of fuse, amperes	Dimensions of a class J fuseholder				
			Dimensions, mm (in)				
			B	C	D	G	
			Distance <sup>a</sup> between contact clips	Minimum width of contact clip	Diameter of ferrule	Distance between end stops	
						Minimum	Maximum
J	600	30	31.75 (1.250)	12.7 (0.5)	20.62 (0.812)	57.94 (2.281)	60.32 (2.375)
		60	28.58 (1.125)	15.88 (0.625)	26.97 (1.062)	61.11 (2.406)	63.5 (2.5)

<sup>a</sup> Tolerances for the B dimensions are:  
60 amperes or less: plus 0.79 mm (0.032 in) and minus 1.57 mm (0.062 in);

Figure 8.2  
Class J 100, 200, 400, and 600 A Fuseholders



SB0575B

Class of fuse	Potential rating of fuse, volts	Current rating of fuse, amperes	Dimensions of a class J fuseholder – not bolted in place			
			Dimensions, mm (in)			
			B	C	E	G
			Distance <sup>a</sup> between contact clips	Minimum width of contact clip	Thickness of blade	Minimum unobstructed clearance
J	600	100	69.85 (2.750)	22.22 (0.875)	3.18 (0.125)	122 (4.80)
		200	79.38 (3.5)	31.75 (1.250)	4.75 (0.187)	150 (5.90)
		400	88.9 (3.5)	44.45 (1.750)	6.35 (0.250)	185 (7.28)
		600	98.43 (3.875)	50.8 (2.0)	9.52 (0.375)	207 (8.15)

<sup>a</sup> Tolerances for the B dimensions are:

100 and 200 amperes: plus 1.57 mm (0.062 in) and minus 0.76 mm (0.032 in);

400 and 600 amperes: plus 2.36 mm (0.093 in).