



# UL 248-7

## STANDARD FOR SAFETY

Low-Voltage Fuses – Part 7: Class H  
Renewable Fuses

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UL Standard for Safety for Low-Voltage Fuses – Part 7: Class H Renewable Fuses, UL 248-7

Second Edition, Dated August 1, 2000

### **Summary of Topics**

*This revision of ANSI/UL 248-7 dated July 5, 2024 is being issued to update the title page to reflect the most recent designation as a Reaffirmed American National Standard (ANS). No technical changes have been made.*

*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. However, the revision pages dated July 5, 2024 will not be jointly issued by UL, CSA, and ANCE as these revision pages only address UL ANSI approval dates.*

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

The requirements are substantially in accordance with Proposal(s) on this subject dated May 17, 2024.

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This ANSI/UL Standard for Safety consists of the Second Edition including revisions through July 5, 2024. The most recent designation of ANSI/UL 248-7 as a Reaffirmed American National Standard (ANS) occurred on July 5, 2024. 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 ULSE at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

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## Preface

This is the harmonized ULSE, CSA Group, and ANCE Standard for *Low-Voltage Fuses – Part 7: Class H Renewable Fuses*. This is the second edition of CAN/CSA-C22.2 No. 248.7-00 (superseding the first edition, published in 1996), the second edition of UL 248-7, and the first edition of NMX-J-009/248/7-2000-ANCE.

This Standard was prepared by a Technical Harmonization Committee comprised of members from ULSE, CSA International, the National Association of Standardization and Certification of the Electrical Sector, the end product manufacturers, and material suppliers. The efforts and support of the members of the Technical Harmonization Committee are gratefully acknowledged.

The present Mexican Standard was developed by the TC 32 Fuses from the Comite de Normalizacion de la Asociacion de Normalizacion y Certificacion, A.C., CONANCE, with the collaboration of the fuse manufacturers and users.

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

### 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 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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# Low-Voltage Fuses – Part 7: Class H Renewable Fuses

## 1 General

NOTE –

*This Part is intended to be read together with the Standard for Low-Voltage Fuses – 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 Low-Voltage Fuses – Part 1: General Requirements, NMX-J-009/248/7-2000-ANCE ♦ CAN/CSA C22.2 No. 248.1 ♦ UL 248-1.*

### 1.1 Scope

This Part applies to Class H Renewable fuses rated 600 A or less and either 250 or 600 V ac. DC ratings are optional.

## 4 Classification

Class H Renewable fuses have an interrupting rating of 10,000 A. Each of the voltage ratings, 250 V ac and 600 V ac, is divided into six body sizes with the maximum current rating,  $I_n$ , for each size as specified in this Part. These fuses are not classified as current limiting. Time-delay ratings are optional.

These fuses may be restored to service after operation by the replacement of the renewal element with one recommended by the manufacturer.

## 5 Characteristics

### 5.2 Voltage rating

For AC, the rating shall be 250 or 600 V ac in accordance with dimensions shown in [Figure A](#) and [Figure B](#). The DC voltage rating may be different from the AC rating.

### 5.3 Current rating

Refer to [Figure A](#) and [Figure B](#) for range of current ratings in each body size for each voltage rating.

### 5.5 Interrupting rating

For AC – 10,000 A

For DC – 10,000 A

## 6 Marking

### 6.1 Marking of fuses

In addition to the requirements in Part 1: The fuse shall be marked "Renewable" and with the recommended renewal element.

Each renewal element shall be marked in accordance with Part 1, Clause 6.1, Items a, b, and c.

g) The fuse shall not be marked "Current Limiting."

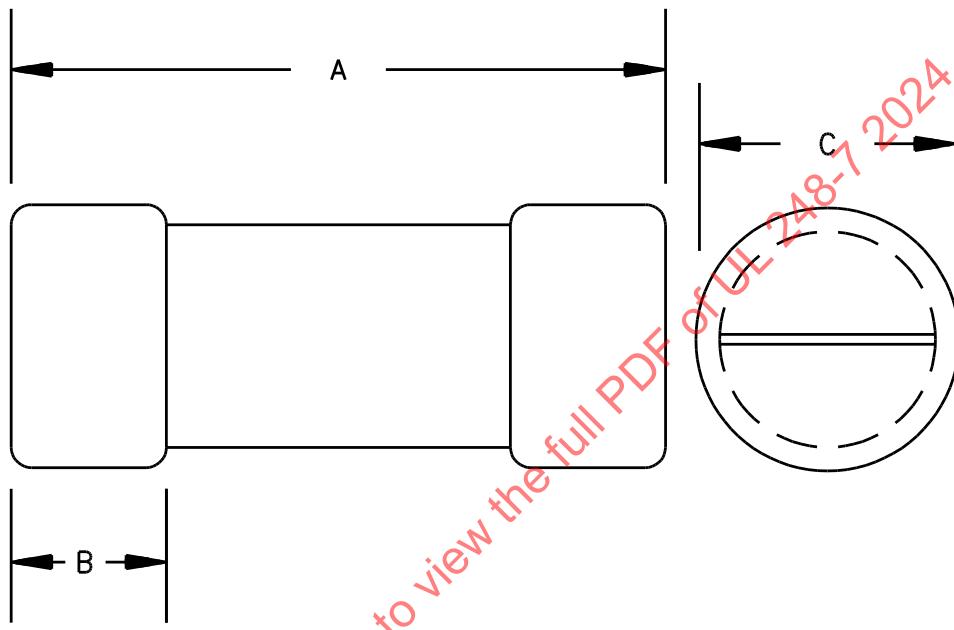
## 7 Construction

### 7.1 Dimensions

Fuse dimensions are shown in [Figure A](#) and [Figure B](#).

**Figure A**

Dimensions of ferrule type Class H Renewable fuses in mm (in)



*Note: The end caps shall be capable of being removed by a tool, e.g. a screwdriver or pliers.*

Rating		Overall length of fuse	Minimum length of ferrule	Outside diameter of ferrule
Volts	Current $I_n$ , A		A <sup>a</sup>	B
250	0 – 30	50.8 (2.00)	12.7 (0.50)	14.3 (0.56)
	31 – 60	76.2 (3.00)	15.9 (0.62)	20.6 (0.81)
600	0 – 30	127.0 (5.00)	15.9 (0.62)	20.6 (0.81)
	31 – 60	139.7 (5.50)	15.9 (0.62)	27.0 (1.06)

<sup>a</sup> Tolerance:  $\pm 0.79$  mm ( $\pm 0.031$  in).

<sup>b</sup> Tolerance:  $\pm 0.20$  mm ( $\pm 0.008$  in).