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CSA C22.2 No. 106:05

National Standard of Canada

(reaffirmed 2019)

HRC-Miscellaneous fuses



Standards Council of Canada
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CSA C22.2 No. 106:05, HRC-Miscellaneous fuses

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CSA C22.2 No. 106:05
HRC-Miscellaneous fuses

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Preface

This is the fifth edition of CSA C22.2 No. 106, *HRC-Miscellaneous fuses*, one of a series of Standards issued under Part II of the *Canadian Electrical Code.* It supersedes the previous editions published in 1992, 1990, 1985, and 1953 under the title *HRC Fuses*.

This Standard specifies requirements for HRCI-MISC and HRCII-MISC fuses.

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

This Standard was prepared by the Subcommittee on C22.2 No. 106, 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. It will be submitted to the Standards Council of Canada for approval as a National Standard of Canada.

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 committee interpretation has not already been published, CSA's procedures for interpretation shall be followed to determine the intended safety principle."

December 2005

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(1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*

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(b) provide an explanation of circumstances surrounding the actual field condition; and

(c) be phrased where possible to permit a specific "yes" or "no" answer.

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C22.2 No. 106-05
HRC-Miscellaneous fuses

1 Scope

This Standard applies to HRC non-renewable cartridge current-limiting fuses of the HRCI-MISC (Form I) type rated 600 A or less and 600 V ac or less, and to HRC non-renewable cartridge current-limiting fuses of the HRCII-MISC (Form II) type rated 1200 A or less and 600 V ac or less, that are intended to be used in accordance with the *Canadian Electrical Code, Part I*.

2 Reference publications

This Standard refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto.

CSA (Canadian Standards Association)
C22.1-02
Canadian Electrical Code, Part I

CAN/CSA-C22.2 No. 0-M91 (R2001)
General requirements — Canadian Electrical Code, Part II

CAN/CSA-C22.2 No. 248 series of Standards:

CAN/CSA-C22.2 No. 248.1-00
Low-voltage fuses — Part 1: General requirements

3 Definitions

The following definitions apply in this Standard:

Arcing time — the time from the instant the fuse element or link has melted and arcing is initiated until final circuit interruption by the fuse.

Clearing time — the time from the beginning of an overcurrent to the final circuit interruption. The clearing time is equal to the sum of the melting time and the arcing time.

Current-limiting fuse — a fuse that, within a specified overcurrent range, limits the clearing time at rated voltage to an interval equal to or less than the first major or symmetrical current loop duration, and limits the peak current to a value less than the available peak current.

Current-limiting range — the range of prospective currents from the threshold current to the interrupting current rating of a current-limiting fuse.

Current rating (I_n) — the nominal root-mean-square (rms) ac or dc ampere rating, based on specified conditions, that is assigned to a fuse.

Dummy — a copper bar of specified dimensions used to calibrate equipment for temperature testing HRCII-MISC fuses.

HRC (high-rupturing capacity) fuse — a fuse with an interrupting rating of at least 100 kA rms symmetrical.