CSA C22.2 No. 106:05

National Standard of Canada

(reaffirmed 2019)

HRC-Miscellaneous fuses

Standards Council of Canada
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REVISED OCTOBER 2019

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Revision History

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

National Standard of Canada — October 2019
Outside front cover, National Standard of Canada text, and title page. 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.

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CSA C22.2 No. 106:05
December 2005

Title: *HRC-Miscellaneous fuses*

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National Standard of Canada

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

Published in December 2005 by CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3

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ICS 29.120.50
ISBN 1-55397-653-3

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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

Notes:

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

(2) *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.*

(3) *This publication was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this publication.*

(4) *CSA Standards are subject to periodic review, and suggestions for their improvement will be referred to the appropriate committee.*

(5) *All enquiries regarding this Standard, including requests for interpretation, should be addressed to Canadian Standards Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6.*

Requests for interpretation should

(a) define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;

(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.

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization *and are published in CSA's periodical* Info Update*, which is available on the CSA Web site at www.csa.ca.*

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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.