CANADIAN STANDARDS ASSOCIATION

C22.2 No. 51-09

Armoured cables

Contents

Preface

This is the eleventh edition of CSA C22.2 No. 51, *Armoured cables*, one of a series of Standards issued by the Canadian Standards Association under the *Canadian Electrical Code, Part II*. It supersedes the previous editions published in 1995, 1989, 1981, 1968, 1961, 1957, 1953, 1949, 1941, and 1938.

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

This Standard was prepared by the Integrated Committee on Metal Clad Cables under the jurisdiction of the Technical Committee on Wiring Products and the Strategic Steering Committee on Requirements for Electrical Safety, and was formally approved by the Technical Committee.

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."

August 2009

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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1 Scope

1.1
This Standard specifies requirements for single- and multi-conductor insulated cables having metallic interlocked armour without an overall jacket (Type AC90 or ACG90) or with an overall jacket (Type ACWU90 or ACGWU90) that are intended for installation in accordance with the *Canadian Electrical Code, Part I*, on systems having nominal voltages of 600 V and less. ACG90 and ACGWU90 apply to multi-conductor insulated cables only.

1.2
This Standard specifies requirements for cables having insulated conductors in sizes 14 AWG to 2000 kcmil. The maximum conductor temperature rating is 90 °C.

1.3
In CSA Standards, "shall" is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; "should" is used to express a recommendation or that which is advised but not required; "may" is used to express an option or that which is permissible within the limits of the standard; and "can" is used to express possibility or capability. Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material. Notes to tables and figures are considered part of the table or figure and may be written as requirements. Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

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)
C22.1-09
Canadian Electrical Code, Part I

CAN/CSA-C22.2 No. 0-M91 (R2006)
General Requirements — Canadian Electrical Code, Part II

C22.2 No. 0.3-01 (R2005)
Test methods for electrical wires and cables

CAN/CSA-C22.2 No. 38-05
Thermoset-insulated wires and cables

CAN/CSA-C22.2 No. 65-03 (R2008)
Wire connectors