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CSA C22.4 No. 1:09
(reaffirmed 2018)

Objective-based industrial electrical code

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Preface

This is the first edition of CSA C22.4 No. 1, *Objective-based industrial electrical code*.

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This Code was prepared by the Subcommittee on the Objective-Based Industrial Electrical Code — Technical Content, under the jurisdiction of the Technical Committee on the Objective-Based Industrial Electrical Code and the Strategic Steering Committee on Requirements for Electrical Safety, and has been 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”.

January 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 Code is stated in its Scope, it is important to note that it remains the responsibility of the users of the Code 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 Code, 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.

C22.4 No. 1-09

Objective-based industrial electrical code

0 Object

This Code is intended for use by an authorized user in conjunction with the implementation of a safety management system developed in accordance with CSA C22.4 No. 2, *Objective-based industrial electrical code — Safety management system requirements*, and as detailed in the authorized user's OBIEC safety management manual. This Code provides references to applicable industry-recognized standards, codes, and recommended practices. This Code is intended to apply only to industrial facilities.

This Code is not intended to permit the use or modification of electrical equipment in a manner outside either the application for which the equipment was certified or the written instructions provided by the manufacturer.

1 Scope

1.1

This Code specifies objectives to provide for the safety of persons, livestock, and property against dangers and damage that can arise from the use of electrical installations and to provide for the proper functioning of those installations. In addition, this Code sets objectives for the protection of property against damage, if the damage can lead to unsafe events or conditions for persons and livestock.

1.2

This Code specifies safety objectives for the following criteria in relation to electrical systems operating or intended to operate at all voltages in electrical installations within industrial facilities:

- (a) design;
- (b) selection of electrical equipment;
- (c) erection and verification; and
- (d) operation and maintenance.

1.3

This Code specifies technical provisions to address the safety objectives. The technical references in this Code are not exclusive and do not necessarily represent all acceptable solutions that might be considered to have a bearing on the objectives of this Code.

1.4

This Code and any standards referenced herein do not make or imply any assurance or guarantee with respect to the life expectancy, durability, or operating performance of the equipment and material referenced herein.

1.5

In CSA Standards, "shall" is used to express a requirement, i.e., a provision that the authorized 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