CSA Group

C22.2 No. 205-12

Signal equipment

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In Memoriam

This edition of C22.2 No. 205 is dedicated to our friend and valued subcommittee member, W.M. (Bill) Shao.

W.M. Shao	WmShao Consultant, Edmonton, Alberta	

Preface

This is the second edition of CSA C22.2 No. 205, *Signal equipment*, one of a series of Standards issued by the Canadian Standards Association under Part II of the *Canadian Electrical Code*. It supersedes the previous edition published in 1983.

This edition updates the 1983 edition of CSA C22.2 No 205. The updates are intended to provide clarification for many new signal applications that are now in common use. In addition, it was necessary to considerably strengthen the requirements related to all aspects of wireless technology, which is growing rapidly. This edition has also incorporated requirements previously contained in CSA TIL H-1[illegible] and TIL H-17 to bring all of the required material into one document.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This Standard was prepared by the Subcommittee on Standard Signal Equipment, under the jurisdiction of the Technical Committee on Consumer and Commercial Products 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."

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

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 Standard 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 Standard.*

4) *To submit a request for interpretation of this Standard, please send the following information to* ***inquiries@csagroup.org*** *and include "Request for interpretation" in the subject line:*

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) *where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.*

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at standardsactivities.csa.ca.

5) *This Standard is subject to periodic review, and suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to* ***inquiries@csagroup.org*** *and include "Proposal for change" in the subject line:*

a) *Standard designation (number);*
b) *relevant clause, table, and/or figure number;*
c) *wording of the proposed change; and*
d) *rationale for the change.*

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Signal equipment

1 Scope

1.1

This Standard covers the electrical, fire, and shock hazard requirements for all signal equipment operating at

a) voltages up to 600V; and
b) double insulated equipment up to 240V

in non–hazardous locations in accordance with the rules of the *Canadian Electrical Code, Part I*.

1.2

The requirements are not intended to replace other requirements that are mandated by provincial, federal, or authorities having jurisdiction for aspects other than electrical fire and shock hazards, nor do they specify the performance of signal equipment.

Notes:

1) *While this document does not address the performance aspects of signaling equipment (volume of an audible indication or brightness of a visual indication), it does specify requirements for the electrical safety of these devices.*

2) *Devices that generate radio frequency signals may also be subject to the requirements of Industry Canada.*

1.3

This Standard covers equipment that performs a sensing and/or signaling function to convey alarm, status, or event-based information to the user and any subsequent associated activation function. The signal equipment may be stand alone or a part of a larger system. Signaling may employ wired or wireless means.

Note: *The equipment can employ audible, visual, motion, or other signaling means such as chimes, gongs, lights, and displays.*

1.4

This Standard applies to energy management equipment including sensing, monitoring, and actuation devices. The requirements also apply to home automation systems. The signal sensing components meeting the requirement of this Standard can be included in a smart grid application for energy management, other than for industrial applications.

1.5

Lighting photo relay systems, stand alone or incorporated within a luminaire, and evaluated as a combination in the final application are within the scope of this Standard.

1.6

This Standard does not apply to devices that are already covered by requirements of another Part II Standard.