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Group**

**C22.2 No. 96.2-15**

# **Down tower power cables for wind turbine applications rated 2 – 35 kV**

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***Down tower power cables for wind turbine applications rated 2 – 35 kV***



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# Preface

This is the first edition of CSA C22.2 No. 96.2, *Down tower power cables for wind turbine applications rated 2 – 35 kV*, one of a series of Standards issued by the CSA Group under the *Canadian Electrical Code, Part II*.

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 Portable and Mine Power Cables, under the jurisdiction of the Technical Committee on Wiring 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.”

**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](mailto: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](http://standardsactivities.csa.ca).*
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  - a) *Standard designation (number);*
  - b) *relevant clause, table, and/or figure number;*
  - c) *wording of the proposed change; and*
  - d) *rationale for the change.*

## C22.2 No. 96.2-15

# Down tower power cables for wind turbine applications rated 2 – 35 kV

## 1 Scope

### 1.1

This Standard specifies construction and testing requirements for single conductor rated 2 kV, single metallic shielded or three conductor metallic shielded power cables rated 5 kV to 35 kV, normally used in wind turbine down tower applications where the cables are subject to frequent flexing and where installation is in accordance with the *Canadian Electrical Code, Part I*.

### 1.2

The cable constructions specified in this Standard are suitable for use at a maximum conductor temperature of 90 °C under normal operating conditions in wet or dry locations, in the down towers of wind turbines.

### 1.3

This Standard specifies the following categories of thermoset insulated cables:

Clause	Category
5	Three-conductor metallic shielded, round flexible power cables for wind turbines, rated 5 kV to 35 kV
6	DLO-DT cable, single conductor, used for general permanent applications rated 2 kV
7	Single-conductor metallic shielded, round flexible power cables for wind turbines, rated 5 kV to 35 kV

### 1.4

The values given in SI (metric) units are the standard. The values given in parentheses are for information only.

### 1.5

In this Standard, “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; and “may” is used to express an option or that which is permissible within the limits of the Standard.

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.