



**CSA C22.2 No. 274:17**  
National Standard of Canada  
*(reaffirmed 2021)*



## Adjustable speed drives



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# *National Standard of Canada*

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# Contents

Technical Committee on Industrial Products	4
Integrated Committee on Adjustable Speed Drives	6
Preface	8
<b>1 Scope</b>	<b>10</b>
<b>2 Reference publications</b>	<b>11</b>
<b>3 Definitions</b>	<b>13</b>
<b>4 Construction</b>	<b>15</b>
4.1 General requirements	15
4.2 Frame and enclosures	16
4.2.1 General	16
4.2.2 Doors, covers, and similar parts of enclosures	17
4.2.3 Thickness of cast-metal enclosures for live parts	18
4.2.4 Thickness of sheet metal enclosures for live parts	18
4.2.5 Openings in enclosures	18
4.2.6 Environmental ratings	21
4.3 Polymeric enclosures	21
4.4 Wiring space and wire bending space	22
4.4.1 Wiring space	22
4.4.2 Wire-bending space	22
4.5 Provisions for mounting	23
4.6 Insulating materials	23
4.7 Means for switching	24
4.8 Live Parts	25
4.9 Protective devices	25
4.9.1 General	25
4.9.2 Overcurrent	26
4.9.3 Control circuit transformer protection	26
4.9.4 Protective device for control transformers	27
4.9.5 Motor overload protection	28
4.9.6 Instantaneous-trip circuit breakers	28
4.9.7 Open phase protection	28
4.9.8 Phase reversal protection	28
4.10 Fuseholders	29
4.11 Internal wiring	29
4.12 Supply connections	31
4.13 Electrical spacings	32
4.14 Grounding and bonding	38
4.14.7 Polymeric enclosures	38
4.15 Interlocks	39
4.16 Liquid cooled drives	40

## 4.17 Capacitor discharge 42

**5 Markings 42**

## 5.1 General marking requirements 42

## 5.36 Field kits and accessories 47

**6 Testing 48**

## 6.1 General 48

## 6.2 Temperature 48

## 6.3 Dielectric strength 51

## 6.4 Verification of electronic motor overload protective circuitry 53

## 6.5 Current limiting control 54

## 6.6 Short circuit test 54

## 6.7 High fault current test 56

## 6.8 Test circuit for short circuit and high fault current tests 57

## 6.9 Prospective short circuit current 58

## 6.10 Protective devices 58

## 6.11 Short circuit calibration of test circuits 59

## 6.11.1 General 59

## 6.11.2 Measurement of currents 10 000 A and less 60

## 6.11.3 Measurement of currents over 10 000 A 60

## 6.12 Breakdown of components test 63

## 6.13 Protective bonding 64

## 6.14 Corona Test 64

## 6.15 Enclosures 65

## 6.15.1 Flammability of enclosure 65

## 6.15.2 Resistance to impact — Enclosures 66

## 6.15.3 Resistance to impact — Observation opening 66

## 6.15.4 Dielectric strength 67

## 6.15.5 Conduit connections 67

## 6.15.6 Bending 67

## 6.15.7 Knockouts 68

## 6.15.8 Securement of snap-on components 68

## 6.15.9 Compression 68

## 6.15.10 Deflection 69

## 6.15.11 Rod entry test for enclosures rated 750 V or higher 69

## 6.16 Abnormal operation tests 69

## 6.17 Contactor overload 71

## 6.18 Capacitor discharge test 71

## 6.19 Surge suppression 71

## 6.20 Impulse voltage test 72

## 6.21 Isolating means and interlock integrity 72

## 6.22 Printed wiring board abnormal operation test 73

## 6.23 Mould stress relief test 74

## 6.24 Diagnostic test 75

**7 Field-installed accessories and kits 75**

## 7.1 General 75

## 7.2 Wire connector kits and grounding kits 75

7.3	Other kits	76
7.4	Markings	76

---

Annex A (informative)	— Examples of wiring space and wire-bending space	122
Annex B (normative)	— Marking translations	123
Annex C (informative)	— Cross-sections of round conductors	126
Annex D (informative)	— Guide to the measurement of corona in ASD assemblies	127
Annex E (informative)	— Dielectric testing	135

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# Preface

This is the second edition of CSA C22.2 No. 274, *Adjustable speed drives*, one of a series of Standards issued by CSA Group under Part II of the *Canadian Electrical Code*. It supersedes the previous edition published in 2013.

This edition includes

- a) updates to the Scope to deal with integrated motor/drive combinations;
- b) clarification on using the spacing requirements of IEC 61800-5-1;
- c) clarification on the use of MOVs;
- d) clarifications regarding the 30 A fuse in ground circuits;
- e) expansion of the contactor overload requirements;
- f) information on testing when surge arresters are present;
- g) additional requirements for mechanical interlocks;
- h) an annex on dielectric testing; and
- i) numerous other minor edits and clarifications throughout.

This Standard follows traditional North American practices for evaluating adjustable speed drives, the international requirements described in IEC 61800-5-1 were reviewed in detail and accommodated within this Standard whenever possible. It is anticipated that the next round of activity for adjustable speed drives will be an adoption of IEC 61800-5-1 to align Canadian requirements with those of the IEC.

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

This Standard was prepared by the Integrated Committee on Adjustable Drives (ICAD), under the jurisdiction of the Technical Committee on Industrial Products (TCIP) and the Strategic Steering Committee on Requirements for Electrical Safety (SCORES), and has been formally approved by the Technical Committee.

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.

**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:**

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- 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.*