

Transfer switch equipment



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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.

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New	Clauses 1.1 j), 1.2 f), 1.2 g), 3.7A, 5.2.6.2.5, 8.1.2.3, E1.2 a), E1.2 b), E2.3 a) 4) – E2.3 a) 6), E2.3 b) 5) – E2.3 b) 11), E2.3 c), E3.2, E3A, E5.1.1, E5.6 – E5.8, and G5.2.3 and Figure E3A.1
Deleted	Clauses 4.2.2 a) – d), 9.13.3.12, and 9.13.3.13

- Update your copy by inserting these revised pages.
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Third Edition, Dated December 22, 2014

Summary of Topics

This revision is being issued to incorporate the following changes:

Revision to Add Recreational Vehicle Transfer Switches to the Scope

Revisions to Address the Grounding and Bonding of Neutral Circuits

Revision to the Overload, Endurance, and Short Circuit Testing

Miscellaneous Revisions Regarding Inlet Assemblies, Mechanical Interlocking of Single

Pole Inlets and Readily Accessible Service Disconnect Switches

Revisions Regarding the Use of "Circuit Breaker Based" Transfer Switches and Compliance with Service Disconnecting Requirements

Revision for Consistency with UL 50E Rain Test

Revisions to Annex E to Cover Freestanding Complete Packaged Fire Pump Power Transfer Units

Revisions to Address System Available Fault Calculations for Momentary Paralleling Situations

Clarification of Marking Requirements

Revised Requirements for Monitoring the Temperature on Inlets



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Transfer Switch Equipment

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ANSI/UL 1008-2018

Commitment for Amendments

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PREFACE

This is the harmonized ANCE, CSA Group, and UL standard for transfer switch equipment. It is the second edition of NMX-J-672-ANCE, the third edition of CSA C22.2 No. 178.1, and the eighth edition of UL 1008. This harmonized standard has been jointly revised on September 21, 2018. For this purpose, CSA Group and UL are issuing revision pages dated September 24, 2018, and ANCE is issuing a new edition dated [month day, year of revision pages].

This harmonized standard was prepared by the Association of Standardization and Certification, (ANCE), CSA Group and Underwriters Laboratories Inc. (UL). The efforts and support of the Technical Harmonization Subcommittee for Transfer Switches and the Council of the Harmonization of Electrotechnical Standards for the Nations of the Americas (CANENA), are gratefully acknowledged.

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

The present Mexican Standard was developed by the CT CDI Control y Distribución Industrial from the Comité de Normalización de la Asociación de Normalización y Certificación, A.C., CONANCE, with the collaboration of the transfer switch manufacturers and users.

This standard was reviewed by the CSA Subcommittee on Automatic Transfer Switches, under the jurisdiction of the CSA Technical Committee on Industrial Products and the CSA Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the CSA Technical Committee.

Application of Standard

Where reference is made to a specific number of samples to be tested, the specified number is to be considered a minimum quantity.

Note: 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.

Level of harmonization

This standard uses the IEC format, but is not based on, nor is it to be considered equivalent to, an IEC standard.

This standard is published as an equivalent standard for ANCE, CSA Group, and UL.

An equivalent standard is a standard that is substantially the same in technical content, except as follows: Technical national differences are allowed for codes and governmental regulations as well as those recognized as being in accordance with NAFTA Article 905, for example, because of fundamental climatic, geographical, technological, or infrastructural factors, scientific justification, or the level of protection that the country considers appropriate. Presentation is word for word except for editorial changes.

Reasons for differences from IEC

There is no corresponding IEC standard.

Interpretations

The interpretation by the standards development organization of an identical or equivalent standard is based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one interpretation of the literal text has been identified, a revision is to be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

TRANSFER SWITCH EQUIPMENT

1 Scope

1.1 This standard applies to the following types of transfer switches that have a maximum rating of 1000 volts for use in non-hazardous locations, in accordance with Annex A1, Item 1:

- a) Automatic transfer switches;
- b) Manual or non-automatic transfer switches;
- c) Closed transition transfer switches;
- d) Hybrid transfer switches;
- e) Transfer switches for fire pumps;
- f) Bypass/isolating switches;
- g) Softload transfer switches;
- h) Transfer switches intended for use as service equipment;
- i) Transfer switches intended for use in mobile/portable applications such as recreational vehicles, motor homes, camping trailers, and mobile health care facilities; and
- j) In Mexico and the United States, branch circuit emergency lighting transfer switches (BCELTS). In Canada, the requirements for BCELTS do not apply.

1.2 This standard specifically does not apply to:

- a) Double-throw switches for use in optional standby systems;
- b) Switches used in equipment manufactured in accordance with Annex A1, Item 9;
- c) In Canada, manually operated generator transfer panels in accordance with Annex A1, Item 12.
- d) Transfer switches rated over 1000 V;
- e) Solid-state (static) transfer equipment;
- f) Transfer switches for aircraft; and
- g) Transfer switches for water craft.

1.3 These requirements apply to transfer switches and their associated control devices including voltage sensing relays, frequency sensing relays, time-delay relays, and the like.

1.4 These requirements apply to completely enclosed transfer switches and to open types intended for mounting in other equipment such as switchboards.

1.5 These requirements apply to bypass/isolation switches used to manually select an available power source to feed load circuits and to provide for total isolation of an automatic transfer switch. These switches may be completely enclosed, enclosed with the transfer switch, or of the open type intended for mounting in other equipment. Refer to Annex D.

1.6 In Canada, automatic transfer switches built to the optional standby requirements of this standard are not permitted. In Mexico and the United States, this requirement does not apply.

1.7 These requirements cover enclosed inlets intended to facilitate connection of portable generators to transfer equipment.

2 General Requirements

2.1 General

2.1.1 Automatic transfer switches for use in legally-required standby systems shall comply with the applicable requirements for transfer switches for use in emergency systems.

2.1.2 Automatic transfer switches for optional standby systems are not recognized in Canada.

2.1.3 Legally-required standby systems are not recognized in Canada.

2.1.4 Bypass/isolation switches may be located in the transfer switch enclosure, separately enclosed, or be of the open type intended for mounting in other equipment, and shall comply with the requirements of Annex D.

2.1.5 Transfer switches covered by this standard may employ solid-state devices only in control circuits or in power circuits of hybrid transfer switches complying with Annex F.

2.1.6 In Canada, general requirements applicable to this standard are given in the latest edition of Annex A1, Item 11.

2.1.7 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; "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. Legends to equations and figures are considered requirements. Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.