



CSA C22.2 No. 178.1:22
National Standard of Canada



Transfer switch equipment



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Transfer switch equipment



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ICS 29.120.40

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Standard for Safety for Transfer Switch Equipment

Fourth Edition, Dated July 13, 2022

Summary of Topics

This new edition dated July 13, 2022 includes the following changes:

- Marking Requirements***
- Scope of Annex J***
- Miscellaneous Updates***
- Table 2***
- Revised LSI Circuit Breaker Markings in Annex I***
- New Annex K for Arc Resistant Design***
- New Annex L for Electromagnetic Compatibility***
- Annex M for Cord Connected Transfer Switch Equipment***
- Marking/Instruction for Short Circuit Withstand Rating when Protected by Fuses***
- Revision of Requirements for Transfer Switches with Integral Inlets***
- Table 25***
- Changes to Align with the 2020 NEC***
- Revisions for Inlets Rated 100A and Greater for Compliance with the 2020 NEC***
- New Annex N for Combination Meter/Transfer Equipment Assemblies***

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Association of Standardization and Certification
NMX-J-672-ANCE
Second Edition



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CSA C22.2 No. 178.1:22
Fourth Edition



Underwriters Laboratories Inc.
UL 1008
Ninth Edition

Transfer Switch Equipment

July 13, 2022



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 third edition of NMX-J-672-ANCE, the fourth edition of CSA C22.2 No. 178.1, and the ninth edition of UL 1008. This edition of NMX-J-672-ANCE supersedes the previous edition published on December 22, 2014 and revised on September 24, 2018. This edition of CSA C22.2 No. 178.1 supersedes the previous edition published on December 22, 2014 and revised on September 24, 2018. This edition of UL 1008 supersedes the previous edition published on December 22, 2014 and revised on September 24, 2018.

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. This standard has been developed in compliance with the 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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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;
- j) Inlet assemblies for transfer switch equipment;
- k) Arc resistant transfer switch equipment;
- l) Cord connected transfer switch equipment;
- m) Combination meter/transfer equipment assemblies; and
- n) 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.