



CSA C61000-3-11:21

Electromagnetic compatibility (EMC) — Part 3-11: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems — Equipment with rated current ≤ 75 A and subject to conditional connection
(IEC 61000-3-11:2017, MOD)

CSA C61000-3-11:21

Compatibilité électromagnétique (CEM) — Partie 3-11 : Limitation des variations de tension, des fluctuations de tension et du papillotement dans les réseaux publics d'alimentation basse tension — Équipements ayant un courant assigné ≤ 75 A et soumis à un raccordement conditionnel
(IEC 61000-3-11:2017, MOD)



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**Electromagnetic compatibility (EMC) — Part 3-11:
Limits — Limitation of voltage changes,
voltage fluctuations and flicker in public low-voltage
supply systems — Equipment with rated
current ≤ 75 A and subject to conditional connection
(IEC 61000-3-11:2017, MOD)**

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Electromagnetic compatibility (EMC) — Part 3-11: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems — Equipment with rated current ≤ 75 A and subject to conditional connection (IEC 61000-3-11:2017, MOD)

CSA Preface

This is the second edition of CSA C61000-3-11, *Electromagnetic compatibility (EMC) — Part 3-11: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems — Equipment with rated current ≤ 75 A and subject to conditional connection*, which is an adoption, with Canadian deviations, of the identically titled IEC (International Electrotechnical Commission) Standard 61000-3-11 (second edition, 2017-04). It supersedes the previous edition, published in 2006 as CAN/CSA-C61000-3-11 (approved IEC 61000-3-11:2000).

For brevity, this Standard will be referred to as “CSA C61000-3-11” throughout.

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

This Standard was reviewed for Canadian adoption by the CSA Subcommittee on Low-Frequency Electromagnetic Compatibility, under the jurisdiction of the CSA Technical Committee on Electromagnetic Compatibility and the CSA Strategic Steering Committee on Power Engineering and Electromagnetic Compatibility, 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.

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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.*

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ELECTROMAGNETIC COMPATIBILITY (EMC) –

Part 3-11: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems – Equipment with rated current ≤ 75 A and subject to conditional connection

1 Scope

This part of IEC 61000 is concerned with the emission of voltage changes, voltage fluctuations and flicker produced by equipment and impressed on the public low-voltage supply system.

It specifies the limits of voltage changes produced by equipment tested under specified conditions.

This document is primarily applicable to electrical and electronic equipment having a rated input current from 16 A up to and including 75 A, which is intended to be connected to public low-voltage distribution systems having nominal system voltages U_n between 220 V and 250 V, line-to-neutral at 50 Hz, and which is subject to conditional connection.

This document is also applicable to equipment within the scope of IEC 61000-3-3 that does not meet the limits when tested or evaluated with reference impedance Z_{ref} and is therefore subject to conditional connection. Equipment which meets the requirements of IEC 61000-3-3 is excluded from this part of IEC 61000.

Equipment tests made in accordance with this document are type tests.

NOTE 1 The flicker limits specified in this document, being the same as those in IEC 61000-3-3, are based on the subjective severity of the flicker imposed on the sight from 230 V/60 W coiled-coil filament lamps when subjected to fluctuations of the supply voltage. For systems with nominal voltages less than 220 V, line-to-neutral and/or frequency of 60 Hz, the limits and reference current values are under consideration.

NOTE 2 The limits in this document relate to the voltage changes experienced by consumers connected at the interface between the public supply low-voltage network and the equipment user's installation. Therefore, it cannot be guaranteed that the users of equipment compliant with this standard will not experience supply disturbance within their own installation due to the operation of this equipment alone, as the impedance at the point of connection of the equipment to the supply within the installation can have an impedance greater than the maximum permissible impedance as determined by the procedures in this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-161, *International Electrotechnical Vocabulary (IEV) – Chapter 161: Electromagnetic compatibility* (available at www.electropedia.org)

IEC TR 60725, *Consideration of reference impedances and public supply network impedances for use in determining the disturbance characteristics of electrical equipment having a rated current ≤ 75 A per phase*

IEC 61000-3-3:2013, *Electromagnetic compatibility (EMC) – Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection*