

BS EN 60038:2011



BSI Standards Publication

CENELEC standard voltages

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National foreword

This British Standard is the UK implementation of EN 60038:2011. It is identical to IEC 60038:2009. It supersedes BS 7697:1993, which is withdrawn.

The CENELEC common modifications have been implemented at the appropriate places in the text. The start and finish of each common modification is indicated in the text by tags **[C]** **[C]**.

The UK participation in its preparation was entrusted to Technical Committee GEL/8, Systems Aspects for Electrical Energy Supply.

A list of organizations represented on this committee can be obtained on request to its secretary.

BSI, as a member of CEN, is obliged to publish EN 60038:2011 as a British Standard. However, attention is drawn to the fact that during the development of this European Standard, the UK committee voted against its approval as a European Standard.

BS EN 60038 specifies standard voltage values which are intended to serve as preferential values for the nominal voltage of electrical supply systems, and as reference values for equipment and system design. The reference values contained within this standard do not replace or modify the values given in product standards.

It has been developed from the IEC Standard IEC 60038.

BS EN 60038 is therefore not intended to set definitive limits for voltages which may be present either on the electricity supply network or in a customer's installation.

Other Standards also exist in this area, including BS EN 50160, *Voltage characteristics of electricity supplied by public electricity networks*, and HD 60364-5-52, *Low voltage electrical installations – Part 5-52: Selection and erection of electrical equipment – Wiring systems* (IEC 60364-5-52).

BS EN 50160 describes the limits or values within which the voltage characteristics can be expected to remain at any supply terminal in public electricity networks under normal operating conditions and does not describe the average situation usually experienced by an individual network user.

HD 60364-5-52 covers voltages which may be experienced within a customer's installation. HD 60364 is implemented in the UK by BS 7671 (IET Wiring Regulations).

In Great Britain, voltage limits at a customer's electricity supply terminals are legally defined by Regulation 27 of the Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002, as amended. In Northern Ireland, Regulation 30 of the Electricity Supply Regulations (Northern Ireland) 1988, as amended, applies.

BS 7697:1993, *Nominal voltages for low voltage public electricity supply systems*, was the implementation of an earlier CENELEC Harmonisation Document, HD 472 S1:1989.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 December 2011.

Amendments/corrigenda issued since publication



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Date	Text affected
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English version

CENELEC standard voltages
(IEC 60038:2009, modified)

Tensions normales du CENELEC
(CEI 60038:2009, modifiée)

CENELEC-Normspannungen
(IEC 60038:2009, modifiziert)

This European Standard was approved by CENELEC on 2011-09-05. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
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Europäisches Komitee für Elektrotechnische Normung

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Foreword

This document (EN 60038:2011) consists of the text of IEC 60038:2009 prepared by IEC/TC 8, "Systems aspects for electrical energy supply", together with the common modifications prepared by CLC Technical Body 8X, "System aspects of electrical energy supply".

The following dates are fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2012-09-05
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2014-09-05

This European Standard supersedes HD 472 S1:1989 + corrigendum February 2002 + A1:1995.

In this standard, the common modifications to the International Standard are indicated by tags  .

The main common modifications to IEC 60038:2009 are the following.

- All references to 60 Hz are removed in the European Standard (reason: 60 Hz is not used in Europe for a.c. electric systems).
- The "in some countries" notes related to non-CENELEC countries are removed.
- The value of 100 kV as highest voltage for equipment corresponding to the value of 90 kV as nominal system voltage is added to Table 4 (reason: this value already exists in EN 62271-1 and is widely used in French transmission systems).
- Sentences containing recommendations are generally put in notes.

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