

Live working — Required insulation level and related air distances — Calculation method

ICS 13.260

Committees responsible for this Draft for Development

The preparation of this Draft for Development was entrusted to Technical Committee PEL/78, Tools for live working, upon which the following bodies were represented:

- Chief and Assistant Chief Fire Officers' Association
- Department of Trade and Industry
- Electricity Association
- Federation of British Hand Tool Manufacturers
- GAMBICA (BEAMA Ltd.)
- Health and Safety Executive
- Industrial Safety (Protective Safety Association)
- National Association of Glove Manufacturers

This Draft for Development, having been prepared under the direction of the Electrotechnical Sector Board, was published under the authority of the Standards Board and comes into effect on 15 October 1995

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The following BSI references relate to the work on this standard:
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Amendments issued since publication

Amd. No.	Date	Comments
9892	March 1998	Indicated by a sideline in the margin

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National foreword

This Draft for Development has been prepared by Technical Committee PEL/78 and is the English language version of European Prestandard ENV 50196:1995 *Live working. Required insulation level and related air distances — Calculation methods* and its amendment A1:1997, published by the European Committee for Electrotechnical Standardization (CENELEC).

Cross-references

Publication referred to	Corresponding British Standard
IEC 50	BS 4727 <i>Glossary of electrotechnical, power; telecommunication, electronics, lighting and colour terms</i> Part 1 <i>Terms common to power; telecommunications and electronics</i>
IEC 50(481):1984	Group 12:1991 <i>Insulators</i> Part 2 <i>Terms particular to power engineering</i>
IEC 50(601):1995	Group 11:1986 <i>Generation, transmission and distribution of electricity terminology</i> BS EN 60071 <i>Insulation co-ordination</i>
IEC 71-2:1976	BS EN 60071-2 <i>Application guide</i>

The United Kingdom actively participated in the preparation of this document. However, the Technical Committee is not in favour of the content of this document but under CENELEC rules is obliged to publish it at a national level. In particular the committee has concern over the fact that the document appears to prohibit the testing of porcelain insulators, and hence prohibits live working in regions of the United Kingdom, because of the way it represents the case of the permissible number of defective units in a multiple string arrangement.

A more acceptable document is being developed by the International Electrotechnical Committee (IEC) and after endorsement by CENELEC is expected to supersede ENV 50196 within the next two years.

This Document is being issued in the Draft for Development series of publications and is of a provisional nature. It should be applied on this provisional basis so that information and experience of its practical application may be obtained.

Comments arising from the use of this Draft for Development are requested so that UK experience can be reported to the European organization responsible for its conversion to a European Standard. A review of this publication will be initiated 2 years after its publication by the European organization so that a decision can be taken on its status at the end of its three-year life. The commencement of the review period will be notified by an announcement in BSI News.

According to the replies received by the end of the review period, the responsible BSI Committee will decide whether to support the conversion into a European Standard, to extend the life of the prestandard or to withdraw it. Comments should be sent in writing to the Secretary of BSI Technical Committee PEL/78 at 389 Chiswick High Road, London W4 4AL giving the document reference and clause number and proposing, where possible, an appropriate revision of the text.

From 1 January 1997, all IEC publications have the number 60000 added to the old number. For instance, IEC 27-1 has been renumbered as IEC 60027-1. For a period of time during the change over from one numbering system to the other, publications may contain identifiers from both systems.

This publication is not to be regarded as a British Standard.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, the ENV title page, pages 2 to 16, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

English version

Live working —
Required insulation level and related air distances —
Calculation method

(including amendment A1:1997)

Travaux sous tension —
Niveau d'isolation requis et distances dans l'air
correspondantes —
Méthode de calcul
(inclut l'amendement A1:1997)

Arbeiten unter Spannung —
Erforderlicher Isolationspegel und zugehörige
Luftabstände —
Berechnungsverfahren
(enthält Änderung A1:1997)

This European Prestandard (ENV) was approved by CENELEC on 1994-10-31 as a prospective standard for provisional application; amendment A1 was approved by CENELEC on 1996-10-15. The period of validity of this ENV is limited initially to three years. After two years the members of CENELEC will be requested to submit their comments, particularly on the question of whether the ENV can be converted into a European Standard (EN).

CENELEC members are required to announce the existence of this ENV in the same way as for an EN and to make the ENV available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B-1050 Brussels

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Ref. No.  ENV 50196:1995 + A1:1997 E


Foreword

This European Prestandard has been prepared by CENELEC technical committee 78: Tools for live working.

It is based on draft prENV 50196:1994, which was approved by the National Committees in the voting procedure started in July 1994.

The result of the voting and the comments received were discussed and decided on by CLC/TC 78 at its meeting in Brussels on 6 and 7 February 1995, and the unanimous decision was taken, to issue the European prestandard in its present form.

The content of this prestandard is based on work presently being done in the field concerned by IEC technical committee 78: Tools for live working, with the intention of publishing the results in an IEC report type 2, which could be transformed into an International Standard at some future date.

Endorsement of such future International Standard as European Standard will result in the withdrawal of the present prestandard. In the meantime, this prestandard is urgently needed for the completion of some European Standards already published or being in preparation.

The “Required Insulation Level For Live Working” dealt with in this prestandard, is another physical entity than the “Rated Insulation Level” specified in IEC 71 and applicable for the construction of electrical installations.

The following dates apply for this prestandard:

dor: 1994-10-31 doa: 1995-02-06

The Annex A to Annex D (under consideration) are informative.

Foreword to amendment A1

This amendment was prepared by the Technical Committee CENELEC TC 78, Equipment and tools for live working.

The text of the draft was submitted to the questionnaire and vote procedure and was approved by CENELEC on 1996-10-15.

The following date was fixed:

- latest date by which the existence of the amendment has to be announced at national level doa 1997-02-01