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Responsible committee: GEL/210 EMC Policy and Standards Committee

Interested committees:

Title: BS EN IEC 61000-4-29 Electromagnetic compatibility (EMC)

Part 4-29: Testing and measurement techniques - Voltage dips; short interruptions and voltage variations on d.c. input power port immunity tests

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

- i) has any issues related to 3rd party IPR, patent or copyright
- ii) affects other national standard(s)
- iii) requires additional national guidance or information

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This draft is issued to allow comments from interested parties; all comments will be given consideration prior to publication. No acknowledgement will normally be sent. **See overleaf for information on the submission of comments.**

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/Figure/ Table/Note	Type of comment	Commend (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: IEC 61000-4-29 ED2	
DATE OF CIRCULATION: 2025-01-03	CLOSING DATE FOR VOTING: 2025-03-28
SUPERSEDES DOCUMENTS: 77A/1134/RR	

IEC SC 77A : EMC - LOW FREQUENCY PHENOMENA	
SECRETARIAT: France	SECRETARY: Mr Cédric LAVENU
OF INTEREST TO THE FOLLOWING COMMITTEES:	HORIZONTAL FUNCTION(S):
ASPECTS CONCERNED: Electromagnetic Compatibility	
☒ SUBMITTED FOR CENELEC PARALLEL VOTING Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING

This document is still under study and subject to change. It should not be used for reference purposes.

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Recipients of this document are invited to submit, with their comments, notification of any relevant "In Some Countries" clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE [AC/22/2007](#) OR [NEW GUIDANCE DOC](#)).

TITLE:
Electromagnetic compatibility (EMC) - Part 4-29: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests

PROPOSED STABILITY DATE: 2025

NOTE FROM TC/SC OFFICERS:

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROMAGNETIC COMPATIBILITY (EMC) –

Part 4-29: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests

FOREWORD

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IEC 61000-4-29 has been prepared by subcommittee 77A: EMC – Low frequency phenomena, of IEC technical committee 77: Electromagnetic compatibility. It is an International Standard.

This standard forms part 4-29 of IEC 61000. It has the status of a basic EMC publication in accordance with IEC Guide 107.

This second edition cancels and replaces the first edition published in 2000. This edition constitutes a technical revision.

The text of this International Standard is based on the following documents:

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

104
105 Full information on the voting for its approval can be found in the report on voting indicated in
106 the above table.

107 The language used for the development of this International Standard is English.

108 This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in
109 accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available
110 at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are
111 described in greater detail at www.iec.ch/publications.

112 The committee has decided that the contents of this document will remain unchanged until the
113 stability date indicated on the IEC website under webstore.iec.ch in the data related to the
114 specific document. At this date, the document will be

- 115 • reconfirmed,
- 116 • withdrawn,
- 117 • replaced by a revised edition, or
- 118 • amended.

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ELECTROMAGNETIC COMPATIBILITY (EMC) –

Part 4-29: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations on d.c. input

1 Scope

This part of IEC 61000 defines test methods for immunity to voltage dips, short interruptions and voltage variations at the d.c. input power port of electrical or electronic equipment.

This standard is applicable to low voltage d.c. power ports of equipment supplied by external d.c. networks.

The object of this standard is to establish a common and reproducible basis for testing electrical and electronic equipment when subjected to voltage dips, short interruptions or voltage variations on d.c. input power ports.

This standard defines:

- the range of test levels;
- the test generator;
- the test set-up;
- the test procedure.

The test described hereinafter applies to electrical and electronic equipment and systems. It also applies to modules or subsystems whenever the EUT (equipment under test) rated power is greater than the test generator capacity specified in clause 6.

The ripple at the d.c. input power port is not included in the scope of this part of IEC 61000. It is covered by IEC 61000-4-17 1)

This standard does not specify the tests to be applied to particular apparatus or systems. Its main aim is to give a general basic reference to IEC product committees. These product committees (or users and manufacturers of equipment) remain responsible for the appropriate choice of the tests and the severity level to be applied to their equipment.

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*

IEC 61000-4-11, *Electromagnetic compatibility (EMC) – Part 4: Testing and measuring techniques – Section 11: Voltage dips, short interruptions and voltage variations immunity tests*

IEC 60038:2021, *IEC standard voltages*