



BSI Standards Publication

Electromagnetic compatibility (EMC)

Part 4-27: Testing and measurement techniques — Unbalance, immunity test for equipment with input current not exceeding 16 A per phase

National foreword

This British Standard is the UK implementation of EN 61000-4-27:2000+A2:2025. It is identical to IEC 61000-4-27:2000, incorporating amendment 1:2009 and amendment 2:2025. It supersedes BS EN 61000-4-27:2000+A1:2009, which will be withdrawn on 30 November 2028.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by A1 A1.

The UK participation in its preparation was entrusted to Technical Committee GEL/210, EMC - Policy committee.

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

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Amendments/corrigenda issued since publication

Date	Text affected
31 August 2009	Implementation of IEC amendment 1:2009 with CENELEC endorsement A1:2009, and alignment of BSI and CENELEC publication dates
30 November 2025	Implementation of IEC amendment 2:2025 with CENELEC endorsement A2:2025

**Electromagnetic compatibility (EMC)
Part 4-27: Testing and measurement techniques -
Unbalance, immunity test for equipment with
input current not exceeding 16 A per phase
(IEC 61000-4-27:2000)**

Compatibilité électromagnétique (CEM)
Partie 4-27: Techniques d'essai et
de mesure -
Essai d'immunité aux déséquilibres
(CEI 61000-4-27:2000)

Elektromagnetische Verträglichkeit (EMV)
Teil 4-27: Prüf- und Messverfahren -
Prüfung der Störfestigkeit gegen
Unsymmetrie (der Versorgungsspannung)
(IEC 61000-4-27:2000)

This European Standard was approved by CENELEC on 2000-09-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, 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

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Foreword

The text of document 77A/308/FDIS, future edition 1 of IEC 61000-4-27, prepared by SC 77A, Low-frequency phenomena, of IEC TC 77, Electromagnetic compatibility, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61000-4-27 on 2000-09-01.

The following dates were 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) 2001-06-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2003-09-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annex ZA is normative and annexes A, B, C and D are informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61000-4-27:2000 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60898 NOTE: Harmonized as EN 60898:1991 (modified).

Foreword to amendment A1

The text of document 77A/672/FDIS, future amendment 1 to IEC 61000-4-27:2000, prepared by SC 77A, Low frequency phenomena, of IEC TC 77, Electromagnetic compatibility, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 61000-4-27:2000 on 2009-03-01.

The following dates were fixed:

- latest date by which the amendment has to be
implemented at national level by publication of
an identical national standard or by endorsement (dop) 2009-12-01
- latest date by which the national standards conflicting
with the amendment have to be withdrawn (dow) 2012-03-01

Endorsement notice

The text of amendment 1:2009 to the International Standard IEC 61000-4-27:2000 was approved by CENELEC as an amendment to the European Standard without any modification.

European foreword to Amendment 2

The text of document 77A/1236/CDV, future edition 1 of IEC 61000-4-27/AMD2, prepared by SC 77A "EMC - Low frequency phenomena" of IEC/TC 77 "Electromagnetic compatibility" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61000-4-27:2000/A2:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2026-11-30 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2028-11-30 document have to be withdrawn

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 61000-4-27:2000/AMD2:2025 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-151	1978	International Electrotechnical Vocabulary (IEV) Chapter 151: Electrical and magnetic devices	-	-
IEC 61000-2-4 + corr. August	1994 1994	Electromagnetic compatibility (EMC) Part 2-4: Environment - Compatibility levels in industrial plants for low-frequency conducted disturbances	EN 61000-2-4	1994

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Electromagnetic compatibility (EMC) -
Part 4-27: Testing and measurement techniques -
Unbalance, immunity test for equipment with input current
not exceeding 16 A per phase**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardisation in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Standardization Organization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61000-4-27 has been prepared by subcommittee 77A: Low-frequency phenomena, of IEC technical committee 77: Electromagnetic compatibility.

It forms part 4-27 of IEC 61000. It has the status of basic EMC publication in accordance with IEC Guide 107.

The text of this standard is based on the following documents:

FDIS	Report on voting
77A/308/FDIS	77A/314/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

Annexes A, B, C and D are for information only.

The committee has decided that the contents of this publication will remain unchanged until 2002. At this date, the publication will be:

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.